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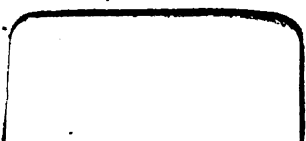
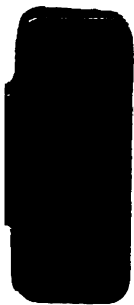
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TWENTY-FIFTH ANNUAL REPORT  
OF THE  
COMMISSIONER OF RAILROADS

OF THE

STATE OF MICHIGAN

FOR THE YEAR 1897



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BY AUTHORITY

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LANSING, MICH.  
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# OFFICERS OF THE DEPARTMENT.

1897.

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SYBRANT WESSELIUS, Kent Co., *Commissioner*.

WILLIAM W. WEDEMEYER, WASHTENAW Co., *Deputy Commissioner*.

ELLIOTT F. MOORE, SAGINAW Co., *Mechanical Engineer*.

---

OFFICIAL ADDRESS:

LANSING, - - MICHIGAN.



## COMMISSIONERS OF RAILROADS.

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DEPARTMENT CREATED APRIL 10, 1873. TERM OF OFFICE TWO YEARS.

---

	Appointed.
STEPHEN S. COBB,	April 25, 1873
WM. B. WILLIAMS,	May 1, 1877
WM. P. INNIS,	January 12, 1883
WM. MCPHERSON, JR.,	January 15, 1885
JOHN T. RICH,	January 12, 1887
CHAS. R. WHITMAN,	January 14, 1891
SIMEON R. BILLINGS,	January 10, 1893
SYBRANT WESSELIUS,	January 14, 1897





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# REPORT.

STATE OF MICHIGAN,  
OFFICE OF THE COMMISSIONER OF RAILROADS, }  
*Lansing, December 31, 1897.*

*Honorable Hazen S. Pingree, Governor of Michigan:*

SIR—In compliance with the requirements of section 3294 of Howell's Annotated Statutes of the State of Michigan, I herewith submit my annual report for the year ending December 31, 1897.

Except as hereinafter specified provision is made in the organic law of this department for the employment of a corps of competent assistants, through the aid of which the work for the past year has been taken up and completed with the success indicated in the report herewith submitted to you.

## RAILROAD CORPORATIONS.

Eighty-one railroads are doing business in the State of Michigan under the general railroad law; and in addition thereto, eight ore and forest roads are operated and doing business in Michigan; all of which make annual reports to this department.

The total railroad mileage of Michigan is 9,958.15, of which 2,165.86 miles are sidings and spurs; 23.21 miles are reported as main second track, and 7,759.08 miles are reported as main track. These figures are based upon the reports of the railroad companies made to this department for the year ending December 31, 1896. During the year covered by the reports there were built 150.47 miles of additional track, consisting mainly of additions to the existing lines of railroads. During the current year, 1897, there has been increased activity in railroad projection and building. Articles of incorporation have been filed with the Secretary of State for the incorporation of six additional companies under the provision of the general railroad law. These companies have filed maps in this department providing for the construction of 247 miles of main track, most of which is now in process of construction, and all of which will have trains operated thereon during the coming year. In addition to the lines projected by the roads above referred to, there

have been built during the current year, 132.04 miles of railroad, making a total of new lines and lines in process of construction 379.04 miles, as compared with 96.11 miles in 1895; 67 miles in 1894; 64.46 miles in 1893, and 172.43 miles in 1892. In addition thereto it may be added that the reports to this department disclose that the year 1897 has witnessed the largest increase of railroad mileage in this State during the history of the department, with the exception of the years 1881 and 1888.

While this department has no detailed record of the number of miles of suburban electric lines constructed during the last two years in Michigan, it should not be forgotten that these companies, as now organized, are conducting a business kindred to that of the steam railroads; and that in computing the increased railroad mileage of Michigan they should not be forgotten in considering the development of the State's transportation facilities.

In order to form a just estimate, not only of the cause for the present activity in the lines of railway extension in this State, but as well to aid in forming an estimate of its future prospects in that regard, I have the honor to submit an article upon the subject of Michigan and its resources, which is embodied in this report.

The following table shows the increase of new line built in Michigan during the past twenty-five years.

*Track mileage—Road owned in Michigan.*

Year.	Miles.	Increase.	
		Year.	Amount.
1872.....	2,975.76		
1873.....	3,253.01	1873	277.25
1874.....	3,314.95	1874	61.97
1875.....	3,346.21	1875	31.23
1876.....	3,410.67	1876	64.46
Increase during 5 years.....			434.91
1877.....	3,455.20	1877	44.53
1878.....	3,554.26	1878	109.06
1879.....	3,637.74	1879	83.48
1880.....	3,823.95	1880	186.21
1881.....	4,252.58	1881	428.63
Increase during 5 years.....			841.91
" " 10 ".....			1,276.82
1882.....	4,609.00	1882	356.42
1883.....	4,965.88	1883	356.88
1884.....	5,120.94	1884	155.06
1885.....	5,247.48	1885	126.54
1886.....	5,577.63	1886	330.15
Increase during 5 years.....			1,325.05
1887.....	5,768.41	1887	190.78
1888.....	6,411.68	1888	643.25
1889.....	6,759.55	1889	347.89
1890.....	6,957.27	1890	197.72
1891.....	7,274.94	1891	317.67
Increase during 5 years.....			1,697.31
1892.....	7,447.37½	1892	172.43½
1893.....	7,511.88½	1893	64.46
1894.....	7,512.50½	1894	62.67
1895.....	7,606.61½	1895	96.11
1896.....	7,759.06½	1896	150.47
Increase during 5 years.....			484.14½
" " 25 ".....			4,783.32½

**COST OF RAILROADS OPERATING IN MICHIGAN AS EVIDENCED BY CAPITAL STOCK AND INDEBTEDNESS—FUNDED AND UNFUNDED.**

For the calendar year ending December 31, 1896, reports of the companies operating in Michigan show that they are capitalized for \$421,498,229.47, divided into shares of \$100 each, of which \$11,131,289.98 is held in Michigan. The stock is held by 24,258 stockholders, 893 of whom are residents of this State, about 97 per cent being held by non-residents.

The funded and unfunded debt of railroads operating in Michigan, as represented by their bonds and unfunded accounts, is \$650,725,491.22, making the total cost of railroads operating in Michigan, as evidenced by their indebtedness last named and their capital stock, \$1,072,223,720.69.

The most cursory examination of these figures will show that this amount is far in excess of the actual cost of the properties, and that in this State, as elsewhere, railroads have been bonded beyond their actual cost in many instances, and in addition thereto they have been stocked for an amount far in excess of their actual cost.

**EXCESSIVE CAPITALIZATION AND BONDING.**

While it has been maintained with some force that in the early development of the State's resources it became necessary to build railroads for the purpose chiefly of offering fruitful fields for speculation in their stocks and bonds, and that upon that basis alone their construction and maintenance was possible, yet it must be now generally admitted upon all sides that this necessity, if it ever has existed, has ceased to be of force. It is no longer necessary to overburden these properties, nor is it longer profitable to do so. The era when investors were willing to invest their means in artificial values has well-nigh passed by, although occasionally it is still possible to impose upon certain portions of the public by floating inflated stocks and bonds. As long as this practice is permitted to continue, as it is under the present laws of Michigan, the State will permit the possible fraud that may be committed thereby in the sale of worthless securities, and in addition thereto will make it difficult, if desirable, to regulate transportation charges of all kinds and reduce them to a proper sum on account of the heavy burden resting upon the companies.

In view of this situation, it appears to this department that the Legislature should at once enact a law prohibiting railroad corporations from bonding and stocking themselves for more than their actual cost. A proper officer or board should be vested with the power to make exact inventory of the assets of the company seeking to stock and bond itself, and have the power to prohibit an overissue of either. All refunding schemes affecting corporations now in existence should also be under the supervision and control of this authority. The enactment of such statute would not hamper the companies in any respect, but simply place them upon the same basis as other lines of legitimate business.



RAILROAD TAXATION.

This department has heretofore had the honor to furnish your Excellency with the data at its command upon the subject of the proper taxation of railroads. I deem it unnecessary, therefore, to enter upon an extended review of that question, as presented by the records and files of this department, respectfully referring to the work accomplished in that behalf by your direction.

Much study has been given by the department to this subject, and I herewith respectfully submit some general conclusions for your consideration, as follows:

First, An increase of the tax upon railroad properties should be accomplished by a general revision of the law taxing all quasi public corporations, and should not be limited to railroads only, as evidenced by the following table, showing amount of taxes paid by certain corporations of this class for year ending July 1st, 1896.

Express .....	\$2,742.34
Insurance .....	212,495.30
Freight, palace and sleeping cars.....	47.53
Railroad companies.....	741,389.57
River improvements.....	2,282.77
Plank road.....	855.52
Telegraph and telephone.....	42,499.37
	<hr/>
	\$1,002,312.40

It should be borne in mind that many corporations of this class pay practically no tax at all.

Second, In the interest of fairness and to compel the property to pay its just contribution to the public burden, a specific tax or a tax on incomes should be abolished;

Third, In determining the value to be placed upon railroad property, the franchise owned by the company should be valued and taxed on the basis of the company's earnings; but the earnings should affect the tax in no other particular;

Fourth, The values for the purposes of taxation, in the opinion of this department, should be fixed by a State board with a corps of competent assistants able to deal justly with the property, and for the purposes of removing the subject of taxing these properties from local prejudice or possible incompetency in the local assessing officer;

Fifth, All taxes realized from railroads and other corporations, on the plan above suggested, should be paid directly to the State Treasurer and applied to the primary school fund so far as deemed expedient; the balance, if any, to be paid into the general fund;

Sixth, A penalty should be inserted in the law so severe that the delays in the courts by appeals will be obtained only at the risk of large expense in the end to the corporation appealing. The question is the most important with which this department has had to deal, and it

is gratifying to know that there is a well-founded hope that the whole matter will be finally determined without that clash between the people and the corporate interests of the State that was at first threatened.

The want of serious attention given to this and other matters of legislation affecting so-called railroad bills would perhaps not bear out this hope, but with a better understanding of the subject matter by the people and the railroads as well the history made by the Legislature thereon as given below cannot be repeated.

#### HISTORY OF RAILROAD LEGISLATION.

The railroad department herewith submits its record of railroad legislation considered by the Legislature of 1897-98 at its first session:

Senator Robinson introduced a bill the object of which was to reduce rates of passenger fare on the railroads of the Upper Peninsula.

This bill was placed on the general order April 22; considered in committee of the whole; failed to pass; reconsidered; tabled April 29. It was taken from the table May 26; failed to pass, although it received a majority of the votes of the Senators present, the vote standing 16 to 15.

Representative Widoe introduced a bill popularly known as the "500-mile mileage bill." The following was the principal provision of the bill: "That 500-mile tickets, and one thousand mile tickets shall be kept for sale at the principal ticket offices of all railroad companies in this State or carrying on business partly within and partly without the limits of this State, at a price not exceeding ten dollars for said 500-mile books, and twenty dollars for the said 1,000-mile books in the lower peninsula, and twelve and fifty one-hundredths dollars for said 500-mile books and twenty-five dollars for said 1,000-mile books in the upper peninsula."

This bill passed the House by a vote of 79 to 7, and was transmitted May 18 to the Senate. In the Senate it was referred to the committee on railroads, and was never reported out.

Representative Donovan introduced a bill to provide for the issue and sale of an interchangeable and redeemable system of mileage books by all persons, companies or corporations operating steam railroads in the State of Michigan.

This bill was ordered printed for committee February 24, and was placed on the general order May 14; considered in committee of the whole May 17; passed and transmitted to the Senate May 18. The vote on this bill in the House was 57 yeas and 27 nays. The bill then went to the Senate, where it was referred to the committee on railroads May 18, and where it remained, as it was never reported out.

Representative Atkinson introduced a bill popularly known as the 2-cent-a-mile bill, reducing the fare on all railroads in the State to two cents a mile.

This bill contemplated an amendment of section 9 of article 2 of act No. 198 of the Public Acts of 1873, which would amend this section, under this heading "Every such corporation shall possess the general powers and be subject to the liabilities and restrictions following, that is to say," to read as follows:

"Ninth, To regulate the time and manner in which passengers and property shall be transported, and the tolls and compensation to be paid therefore; but such compensation for transporting any passenger and his or her ordinary baggage, not exceeding in weight one hundred and fifty pounds, shall not exceed the price of two cents per mile for any distance."

This bill was reported; printed for committee February 17; made special order for April 13 and afterward for April 28 and May 12. It was defeated May 12 by a vote of 49 to 41; reconsidered and tabled May 13.

Senator Barnard introduced a bill requiring railroad companies to furnish transportation to the office of the Commissioner of Railroads.

This bill was referred to the committee on railroads and reported adversely; tabled February 10; taken up and referred to the committee on State affairs February 16. This committee reported a substitute with following title: "A bill requiring railroad companies in the State of Michigan to transport over their lines the Commissioner of Railroads, his deputy, mechanical engineer, and other duly appointed persons while engaged in official business in discharge of the duties of such office."

This bill was referred to the committee on judiciary April 8, but was never voted on because the committee never reported it out.

Representative Lusk introduced a bill to prohibit public officers from soliciting or accepting passes, favors or free transportation from any railroad company, street railroad company, steamboat or transportation company, or any other corporation engaged in carrying passengers.

This bill was referred to the committee on railroads, and tabled on recommendation of that committee.

Representative Atkinson introduced a bill to prevent discrimination between passengers and shippers of freight on railroads in this State, and to provide a penalty therefor.

This bill was referred to the committee on railroads, printed for use of the committee February 18; made special order April 13; considered in committee of the whole, and finally tabled on April 14.

Senator Flood introduced a bill to regulate and prescribe the tolls and compensation which railroad companies and other corporations operating railroads in the State of Michigan may charge for transporting passengers and baggage.

This bill was tabled February 24. On April 22 the same was taken from the table and referred to the committee on railroads, but never was reported out by the committee.

Representative Fuller introduced a bill to regulate rates of freight on iron ore on railroads in the State of Michigan.

This bill was tabled February 24.

Senator Holmes introduced a bill to regulate railway corporations and other common carriers in this State and to define the powers and duties of the Board of Railway Commissioners in relation to the same, and to prevent and punish extortion and unjust discrimination in the rates charged for the transportation of passengers and freights on railroads in this State, and to prescribe the mode of procedure and rules of evidence in relation thereto, and to repeal all laws in force in direct conflict with the provisions of the same.

This bill was referred to the committee on railroads; ordered printed for the committee March 4. It was never reported out by the railroad committee, and was therefore never acted upon by the Senate.

Representative Atkinson introduced a bill to provide a remedy for persons aggrieved by overcharging by railroad companies, and to provide a penalty for the violation of any provision of the special railroad charters in this State by railroad companies operating under such special charters.

This bill was referred to the committee on railroads; made special order for April 28, and finally tabled May 11.

Other bills looking to the same end were tabled on recommendation of the committee on railroads.

Representative Bricker introduced a bill for the regulation of freight rates in the State of Michigan, and for providing penalties for the violation of the same.

This bill was referred to the committee on railroads; was made special order for April 28 and May 11; placed on the general order May 25.

Senator Merriman introduced a bill February 9, to amend section 3 of article 3 of act 198, session laws of 1873, as amended by act 45, public acts of 1879, as amended by act 174, public acts of 1891, as amended by act 129, public acts of 1893, entitled "An act to revise the laws providing for the incorporation of railroad companies, and to regulate the running and management, and to fix the duties and liabilities of all said roads and other corporations owning or operating any railroads in this State," approved May 1, 1873, being compiler's section 3360, Howell's Annotated Statutes of Michigan.

This bill had reference to the taxation of railroads; its principal provision being as follows:

Section 3. Every railroad company formed under the provisions of this act, or which now is or may hereafter be brought under the provisions of the general law of this State for the taxation of railway or railroad corporations, and every railroad company or other corporation, owning or operating any railroad situated in whole or in part in this State shall, on or before the first day of July in each year, pay to the State Treasurer on the statement of the Auditor General a specific tax upon the property and business of such railroad corporation operated within the State, which tax shall be computed in the following manner, viz.: Upon all such gross income not exceeding two thousand dollars per mile of road actually operated within this State; two and one-half per cent of such gross income; upon such gross income in excess of two thousand dollars and not exceeding four thousand dollars per mile, three and one-fourth per cent thereof; upon all such gross income in excess of four thousand dollars and not exceeding six thousand dollars per mile, four per cent thereof; and upon all such gross income in excess of six thousand dollars per mile, four and one-half per cent thereof."

The House amended the bill as follows:

1. By striking out of lines 1, 2, 3 and 4 of section 3 the words "formed under the provisions of this act or which now is or may hereafter be brought under the provisions of the general law of this

State for the taxation of railway or railroad corporations, and every railroad company or other corporation."

2. By striking out of line 13 of section 3 the words "three and one-fourth" and inserting in lieu thereof the word "four."

3. By striking out of line 15 of section 3 the word "four" and inserting in lieu thereof the word "six."

4. By striking out of lines 16 and 17 of section 3 the words "four and one-half" and inserting in lieu thereof the word "ten."

The Senate refused to concur in the amendments. The bill was then returned to the Senate by the House, which insisted on its amendments and asked for a committee of conference in regard to the difference existing between the House and Senate relative to the bill. Such committees were appointed, the members of the Senate committee being Senators Merriman, Preston, Maitland, Teeple and Youmans. The members of the House committee were Messrs. Chamberlain, Sawyer, Kelly, Fleischhauer and Washer. The report of the conference committee was adopted by the Senate and retransmitted May 20. It was adopted by the House and returned May 25. Referred by the Senate for enrollment May 26.

Representative Stoneman introduced a bill to provide for the local taxation of railroads. This was referred to the committee on railroads; printed for the use of the committee February 24; made special order for April 13; finally considered in committee of the whole May 11; taken from third reading and referred to the committee on judiciary May 12; reported; tabled May 28.

Representative Green introduced a bill to provide for the taxation and collection of taxes of persons, companies, associations and corporations whether located within or without this State, engaged in running palace, drawing-room, dining or sleeping cars, over or upon any railroad situated wholly or partly within this State.

This bill was referred to the committee on private corporations; reported and ordered printed March 9; finally reported and tabled May 28.

Representative McGill introduced a bill evidently having for its object to bring the railroads north of parallel 44 under the general tax law and subject to the same rate of taxation as the other railroads of the State.

(It will be remembered that railroads north of parallel 44 are now exempt from taxation "until they have operated for the full period of ten years unless the gross earnings shall exceed four thousand dollars per mile, etc.")

This bill was referred to the committee on general taxation; reported May 9, and finally tabled May 28.

Representative Stoneman introduced a bill to provide for the determination of the valuation, assessment and taxation of the property of telephone, telegraph, railroad, sleeping and parlor car and express companies and such other property as is not now valued, assessed and taxed under the provisions of the general laws of this State, and to provide for the collection of such tax in the locality in which said property is located, and to repeal all laws or parts of laws in conflict therewith.

This bill was referred to the committee on general taxation. Bill was tabled.

Representative Stoneman introduced a bill providing that the railroad companies should defray all the expenses of the Commissioner of Railroad's office, not exceeding twenty-five thousand dollars a year.

This bill was referred to the committee on railroads, and printed for that committee May 24; tabled on recommendation of same committee May 28.

Representative Stoneman introduced a bill providing for the payment of a license on railway sleeping cars, regulating fare charged and regulating the method of operating the berths of said sleeping cars.

This bill was reported and ordered printed March 9, and it was tabled May 28.

Representative Bemis introduced a bill to provide for a report and payment of a license fee by an issuance of a license to sleeping, drawing-room, parlor, palace and chair car companies doing business in this State.

This bill was referred to the committee on private corporations; reported general order May 18.

Senator Loomis introduced a bill having for its object to require railroads to carry bicycles free of charge.

This bill was referred to the Senate committee on railroads; printed for the committee, and never reported.

Representative Anderson introduced a bill in the House having for its object to require railroads to carry bicycles free of charge, which bill passed the House by a unanimous vote; was given immediate effect; transmitted to the Senate; passed the Senate; approved April 29.

Representative Eikhoff introduced a bill to regulate the carrying of passengers by all railway companies, corporations, co-partners or individuals.

This bill required railway companies to furnish seats for passengers, and made it a misdemeanor to collect fares unless seats were furnished. The bill was referred to the committee on railroads; printed for use of committee February 26; tabled May 28, on recommendation of committee.

Senator Bostwick introduced into the Senate a bill having a similar purpose to that of Mr. Eikhoff in the House, namely, to compel railroad companies to furnish seats to passengers.

This bill was referred to the committee on railroads, and was never reported out.

Senator Youmans introduced a bill to secure greater safety to passengers on steam railroads and electric railroads other than street railways.

This bill was referred to the committee on railroads; reported favorably, and passed; transmitted April 1st. In the House the bill was tabled May 28 on recommendation of the committee on railroads.

Senator Youmans also introduced a bill to secure greater safety to passengers getting on and off passenger cars on steam railroads and electric railroads other than street railways.

This bill was referred to the committee on railroads; printed for the committee March 4 but never reported.

Representative Foote introduced a bill to provide for public ingress and egress from railroad depots.

This bill was referred to the committee on railroads; printed for use of the committee February 18; considered in committee of the whole; motion to strike out all after the enacting clause lost; tabled May 11; motion to take the bill from table lost May 12; taken from table and placed on third reading May 19. Substitute not adopted and tabled May 28.

Representative Weier introduced a bill to provide for the protection of persons and property in highways at steam or electric railway crossings over public highways, regulating the use of such crossings by street railway, electric or steam railroad companies and providing for damage for persons or property injured thereat.

This bill was reported; printed March 2; tabled March 28.

Representative Sawyer introduced a bill to protect the lives and property of persons at the crossings of railroads and public highways within the State of Michigan.

The principal provision of this bill is as follows: "It shall be the duty of the Commissioner whenever applied to by petition signed by at least five freeholders of this State using any crossing and duly verified, setting forth that any railroad giving its location and situation, is dangerous to the traveling public; to proceed forthwith to investigate the same, and if he shall find the said petition to be true and the said railroad crossings be so situated as to be dangerous or likely to be injurious to the traveling public he shall forthwith order and require the railroad company whose duty it is to maintain any such crossing, forthwith to erect at any such railroad crossing an automatic bell signal \* \* \* within thirty days from the service of the same upon such railroad company."

This bill passed the House April 15, the vote being yeas 65, nays 2. It was then transmitted to the Senate where it was referred to the committee on railroads April 16; reported favorably April 29; finally passed and returned April 30. The vote on the bill in the Senate was yeas 21, nays 0.

Representative Peek introduced a bill to prescribe the liability of railroad corporations owning or operating a railroad in this State, for damages sustained by its agents or servants by reason of the negligence of any other agent or servant thereof, when such damage is sustained within this State:

The bill read as follows:

"Section 1. The People of the State of Michigan enact, That every railroad corporation owning or operating a railroad in the State shall be liable for all damages sustained by any agent or servant thereof, by reason of the negligence of any other agent or servant thereof, without contributory negligence on his part when sustained within the State, and no contract, rule or regulation between such corporation and any other agent or servant shall impair or diminish such liability."

This bill was referred to the committee on railroads; one thousand extra copies printed for the committee February 17; tabled on recommendation of the committee May 28.

Representative Weier introduced a bill to define the rights of employés of railroad corporations (including street railway corporations), and to determine the liability of such corporations to its employés for injuries resulting from the negligence of employés of such corporations. The provisions were as follows:

"Section 1. The People of the State of Michigan enact, That every employé of a railroad or street railway corporation shall have the same rights and remedies for an injury suffered by him or her from the act or omission of the corporation, or its employés, as are allowed by law to other persons not employés, where the injury results from the negligence of a superior agent or officer, or of a person having the right to control or direct the services of the party injured, and also when the injury results from the negligence of a fellow servant engaged in another department of labor from that of the party injured, or of a fellow-servant on another train of cars, or one engaged about a different piece of work. Knowledge by an employé injured of the defective or unsafe condition or character of any machinery, ways or appliances, shall not be a defense to an action for injury caused thereby, except as to conductors or engineers in charge of dangerous or unsafe cars or engines or motors operated by them.

"Section 2. A motorman on an electric car shall be deemed an engineer in the meaning of this act. A motor car, with or without trailers, shall likewise be deemed a train.

"Section 3. Where death ensues to an employé the legal or personal representatives of the person injured shall have the same rights and remedies as are allowed by law to such representatives of other persons.

"Section 4. Any contract or agreement, express or implied, made by an employé to waive any benefits conferred by this section, shall be null and void; and all existing contracts of like nature shall be terminated and deemed and held inoperative hereafter.

"Section 5. This act shall not deprive an employé of any corporation, or his legal or personal representatives, of any right or remedy that he now has by law.

"Section 6. This act shall take immediate effect."

This bill was referred to the committee on railroads and labor January 13; reported; printed for committee March 9.

Representative Neidermeier introduced a bill to provide for the construction and maintenance of stock or cattle guards at public highway crossings by steam railroad companies, and providing damage for injury to live stock on account of the want thereof.

Referred to the committee on railroads; reported; one thousand extra copies printed for the committee; made special order for April 28 and May 11; placed on the general order May 25. Legislature adjourned without action.

Representative Kelly introduced a bill to prohibit the use of snow flanges upon locomotives in this State, and to provide a penalty therefor.

This bill was referred to the committee on railroads; printed for use of the committee, and tabled May 28 on the recommendation of committee.



Senator Hughes introduced a bill to require railroad companies to weigh grain and grain products upon the request of shippers, and give certificates of the same.

This bill was referred to the committee on railroads; tabled; taken from table and referred to committee on State affairs March 17. Reported substitute, same title, April 21; considered in committee and finally passed and transmitted April 28; was taken up on special order May 25, but never was enacted into law.

Senator Covell introduced a bill entitled "An act to provide for the appointment of a Commissioner of Railroads and to define his powers, duties and fix his compensation, etc.," which bill passed the Senate March 16; transmitted to the House where, on May 11, it was considered in committee of the whole. All after the title and enacting clause was stricken out, and the title was tabled.

Senator Holmes introduced a bill to establish a Board of Railroad Commissioners, prescribe their qualifications, fix their salaries, and for the appointment of a secretary for such board and to fix his salary."

On March 4 this bill was referred to the committee on railroads and ordered printed for said committee, but never reported out.

Representative Foote introduced a bill to amend that portion of the act for incorporating and regulating railroad companies, that refers to the crossing board and its duties.

This bill was referred to the committee on railroads. Placed on general order April 28; on for third reading and passed May 17. Referred to Senate committee on railroads May 18; reported favorably May 19; considered in committee of the whole and ordered to third reading May 24; passed and returned to House May 24. Reported enrolled May 25.

Senator Mudge introduced a bill entitled "An act to prohibit railroad companies from taking up their tracks and abandoning their stations and failing to operate their road in certain cases."

This bill was referred to the committee on railroads; printed for use of the committee March 4, but was never reported.

Senator Mudge introduced a similar bill February 19; it was referred to the committee on railroads, and never reported.

Representative Dudley introduced a bill to authorize railroad companies and street railway companies now organized, or that may hereafter be organized under the laws of the State, to lease the property and franchises of each other.

This bill was referred to the committee on railroads May 6; placed on the general order May 6; made special order May 11; placed on the general order May 17 and 18; not passed; reconsidered; tabled May 19; taken up and recommitted to the general order May 20; considered in the committee of the whole and recommitted to the committee on railroads May 24; reported; tabled May 28.

Representative Atkinson introduced a bill requiring all railroad corporations to hold at least one annual stockholders meeting and making regulations concerning it.

This bill passed the House May 12, and was transmitted to the Senate the same day. It was referred to the committee on railroads in the Senate May 14; reported favorably May 19; considered in the committee of the

whole and ordered to third reading May 24; passed, and returned May 24; referred for enrollment May 25.

Representative Atkinson introduced a bill to permit foreign railroad companies to hold and own certain lands in this State, to confirm conveyances of such lands to other foreign railroad companies on certain conditions, and to authorize the recording of a copy of agreements by which such conveyances have been or may be hereafter made.

This bill was referred to the committee on railroads January 27; reported, printed for committee February 17; special order for April 14, April 28 and May 11; considered in committee of the whole; passed, transmitted May 20. In the Senate referred to the committee on railroads May 20; reported favorably May 21; considered in committee of the whole; ordered to third reading May 25; passed May 26; finally enrolled May 27; approved May 31.

Representative Stewart introduced a bill to amend section 9 of an act entitled "An act to revise the laws providing for the incorporation of railroad companies and to regulate the running and management and to fix the duties and liabilities for all railroad and other corporations owning or operating any railroad in this State."

This bill was ordered printed for the committee February 24; tabled on recommendation of the committee on railroads May 28.

#### A FINAL DECISION OF THE SUPREME COURT OF THE STATE CONCERNING THE VALIDITY OF ONE OF THE SPECIAL CHARTERS GRANTED RAILROADS.

After many years of agitation by the people, the press and certain members of the legislature, a chapter of much value in determining the relation of the specially chartered roads of the State to the general railroad law thereof, has been closed by the supreme court. On account of its far-reaching influence upon the future policy of the State, and as well upon sundry laws upon the statute books not now enforced against these specially chartered companies, and in order to make the opinion easy of access to the persons receiving this report, the same is herewith printed in full.

At the time of the institution of this suit in the lower court, a majority of the railroads in the State, until the adoption of the one-thousand mile books recently issued under the rules of the Central Passenger Association, obeyed the provisions of act No. 90, public acts of 1891, requiring them to furnish one-thousand mile books for twenty dollars, good for use by the purchaser, his wife and children. The companies acting under special charters, notably the Michigan Central and the Lake Shore & Michigan Southern Railroads, refused to comply therewith. An action was instituted against the last named company in the circuit court for the county of Lenawee, where in due course of time the company was defeated. It took an appeal from the lower court to the supreme court of the State, which also rendered its decision against it. An appeal to the supreme court of the United States is now being perfected by the company.





M. C. R. R., BATTLE CREEK

EFFECT OF THE DECISION UPON THE AMOUNT OF TAX TO BE PAID BY THE COMPANY.

The Lake Shore & Michigan Southern Railway Company has heretofore been taxed under the provisions of section 31 of its special charter, said tax being computed upon its "capital and debt being upon such portion of the whole of its capital and loans as is actually employed in the State of Michigan." The amount of this tax has not varied for a number of years, a fixed amount being paid annually in the sum of \$46,743.60. Computed under the general law as it now exists upon the statute books, upon the earnings of the company as reported for the year 1896, the tax would amount to \$47,845.82, a net gain to the State of \$1,102.22.

SMITH v. LAKE SHORE & M. S. RY. CO.

(Supreme Court of Michigan. Oct. 1, 1897.)

RAILROADS—LEGISLATIVE CONTROL—CONSOLIDATION OF COMPANIES—MAXIMUM RATES—MILEAGE BOOKS—TIME LIMIT.

1. Pub. Acts 1891, No. 90, requiring railroad companies in the state to keep for sale 1,000-mile tickets, at certain specified rates, to be issued in the name of the purchaser, his wife and children, and valid for two years, was intended to apply only to the transportation of passengers within the state, and is therefore not invalid, as being a regulation of interstate commerce.

2. Where a railroad company existing under a special charter was consolidated with a company existing under the laws of another state, by virtue of Pub. Acts 1855, No. 82, §§ 50, 52, providing for such consolidation "into a single corporation," which "new corporation" shall possess all the powers, rights, and franchises conferred on such corporations, respectively, and shall be subject to all the restrictions and perform all the duties imposed by their respective charters or law of organization, not inconsistent with the provisions of such act, and that on the election of the first board of directors of the "corporation created by said agreement," all the rights, franchises, and property of each thereof shall be deemed to be transferred to and vested in such "new corporation" without any other deed or transfer, and such "new corporation" shall hold and enjoy the same, such consolidated entity was hereby constituted a new corporation, created under a general law, which, under Const. art. 15, § 1, "may be amended, altered, or repealed."

3. Under Const. art. 19a, § 1, empowering the legislature to pass laws, from time to time, establishing reasonable maximum rates and charges for the transportation of passengers on railroads, the legislature was authorized, in addition to establishing a maximum rate for a single fare, to establish the rate at which mileage books shall be furnished, as the term "maximum rate," in such constitutional provision, means the maximum rate which the company is to be permitted to charge under a given set of circumstances.

4. It is competent for the legislature, under a constitutional provision reserving to it the power to amend, alter, or repeal the laws relating to the incorporation of railroad companies, to provide that a ticket issued to a passenger shall be valid for a definite, reasonable time.

Grant and Hooker, JJ., dissenting.

Certiorari to circuit court, Lenawee county; Victor H. Lane, Judge.

Petition by Henry C. Smith, as relator, for a writ of mandamus to the Lake Shore & Michigan Southern Railway Company, to compel the issue of a mileage book in the name of himself and wife. From an order awarding the writ, respondent brings certiorari. Affirmed.

Fred A. Maynard, Atty. Gen. (Watts, Bean & Smith, of counsel), for relator. Ashley Pond, A. C. Angell, and C. E. Weaver (George C. Greene, of counsel), for respondent.

Montgomery, J. The relator applied to the respondent company for a 1,000-mile mileage book, to be issued in the name of himself and wife, and was refused. He thereupon brought this proceeding in the circuit court, to compel the respondent to issue such a ticket. The circuit judge granted an order that a ticket good upon the lines of the respondent in this State be issued, and this order is the one now under review. The action is based upon the amendment to section 9 of the railroad law, adopted and embodied in act No. 90 of the public acts of 1891, which contains the following provision: "One thousand mile tickets shall be kept for sale at the principal ticket offices of all railroad companies in this State, or carrying on business partly within and partly without the limits of this State, at a price not exceeding twenty dollars in the lower peninsula and twenty-five dollars in the upper peninsula. Such one thousand mile tickets may be made non-transferrable, but, whenever required by the purchaser, they shall be issued in the name of the purchaser, his wife and children, designating the name of each on each ticket. \* \* \* Each one thousand mile ticket shall be valid for two years only, after date of purchase." In the same section of the statute it is provided that the rates of fare shall not exceed 2 cents a mile for carriage of passengers by railroads whose gross earnings are more than \$3,000 per mile, 2½ for roads whose gross earnings are more than \$2,000 and less than \$3,000, and for companies whose earnings are less than \$2,000 per mile 3 cents per mile, except in the upper peninsula, where a higher rate is permitted. It is contended that there was error in the ruling below, and various grounds are alleged. First, it is contended that the statute is an attempt on the part of the legislature to provide for the sale of mileage which shall be good outside of the State, and that, as this affects interstate commerce, it is unconstitutional; second, that the charter of the Michigan Southern Railway Company, passed in 1846, which provided that "it shall and may be lawful for said company from time to time to fix, regulate and receive the dues and charges taken for transportation of property and persons on said railroad as aforesaid: \* \* \* Provided, Said company shall charge no greater sum or tolls for the transportation of persons and property than were charged or authorized by the State of Michigan to be taken by the Southern Railroad on the first day of January last,"—is still in force, and, as it was granted prior to the amendment of the constitution reserving the right to alter or amend charters of corporations organized under the laws of the State, that the legislation in question impairs the obligation of contracts, within the doctrine of the Dartmouth College Case, 4 Wheat. 518, and is, for this reason, invalid; third, that, independently of this provision, the act is unconstitutional, for the reason that it is an attempt to compel railroad companies to enter into contracts to be performed in the future, at any time within two years, and is an invasion of the right to the use of property; and in the same connection it is contended that this is in violation of the fourteenth amendment of the constitution of the United States, which provides that no person shall be

deprived of property without due process of law; fourth, it is contended that the amendment to the constitution (article 19a, § 1) is a limitation upon the power of the legislature to legislate as to rates and charges of transportation, and limits the right in that regard to the fixing of maximum rates, and that the provision for the issuing of a mileage book is not a fixing of maximum rates of charge, but is a further regulation.

1. The first contention cannot be allowed, for the reason that the statute, fairly construed, was intended to limit the use of the mileage ticket to the state of Michigan. It fixes the price of the ticket,—not exceeding \$20 in the Lower Peninsula, and \$25 in the Upper Peninsula. While the language is not very apt, we think it was the clear intention that a ticket, the price of which should be \$20 for 1,000 miles of transportation, would be one entitling the purchaser to carriage in the Lower Peninsula of Michigan, and one at \$25 to carriage in the Upper Peninsula, and that it was not the intention by this reference to locality to fix the place where the tickets should be placed on sale. Thus construed, the statute cannot be held to be a regulation of interstate commerce.

2. The answer of respondent sets out that in 1846 a special charter, containing the provisions above quoted, was granted to the Michigan Southern Railroad Company; that subsequently the Michigan Southern Railroad Company, under an act of the legislature of the State of Michigan, became consolidated with a corporation of the state of Indiana, known as the Northern Indiana Railroad Company, thereby forming the Michigan Southern & Northern Indiana Railroad Company, which company then succeeded to all the rights, franchises, property, and powers of the Michigan Southern Railroad Company; and that the Michigan Southern & Northern Indiana Railroad Company afterwards, under due legislative authority in that behalf, entered into consolidation with certain other railroad companies, organized under the laws of Indiana, Ohio, Pennsylvania, and New York, respectively, and thereby formed the said respondent, the Lake Shore & Michigan Southern Railway Company; and that this respondent thereby acquired all the rights, franchises, powers, and property of the Michigan Southern Railroad Company and the Michigan Southern & Northern Indiana Railroad Company, and holds and is entitled to all the rights, franchises, powers, and privileges granted in and by the charter aforesaid, and by the acts of the legislature of the said state. The last consolidation set up was under act No. 82 of the laws of 1855, entitled "An act to provide for the incorporation of railroad companies." Section 50 provides that "any railroad company in this state, forming a continuous or connected line with any other railroad company, may consolidate with such other company, either in or out of this state, into a single corporation. \* \* \* Such new corporation shall possess all the powers, rights and franchises conferred upon such two or more corporations, and shall be subject to all the restrictions and perform all the duties imposed by the provisions of their respective charters or laws of organization, not inconsistent with the provisions of this act." By section 52 it is provided that, "upon the election of the first board of directors of the corporation created by said agreement, all and singular the rights and franchises of each and all of said two or more corporations, parties to such agreement, all and singular their rights and interests in

and to every species of property and things in action, shall be determined to be transferred to, and vested in such new corporation, without any other deed or transfer; and such new corporation shall hold and enjoy the same, together with all the right of way and other property, in the same manner, and to the same intent as if the said two or more corporations, parties to such agreement, should have continued to retain the title and transact the business of such corporations." It is contended by the defendant that, under this statute, where a consolidation takes place of a corporation organized and existing under a special charter, as did the respondent company, with a corporation or corporations existing under the laws of another state, the effect is not to annihilate the previously existing Michigan corporation, but that upon the consolidation the original corporation brings to the new entity the powers and privileges already possessed, and that the consolidated company simply exercises in each jurisdiction the powers the corporation there chartered had possessed, and succeeds there to its privileges. The learned counsel for respondent cites, as sustaining this view, *State Treasurer v. Auditor General*, 46 Mich. 224, 9 N. W. 258; *Chicago & N. W. Ry. Co. v. Auditor General*, 53 Mich. 79, 18 N. W. 586; *Nashua & L. R. Co. v. Boston & L. R. Co.*, 136 U. S. 356, 10 Sup. Ct. 1071; *People v. New York, C. & St. L. Ry. Co.*, 129 N. Y. 474, 29 N. E. 959.

Passing the consideration of these cases for the time, and having reference to the terms of the act under which the consolidation took place, it is to be observed that this act constituted the consolidated entity a "new corporation," if we regard the terms employed in the statute, in section 50, above quoted, which limits the rights and franchises derived from the old corporation, and to be exercised by the new, to such as are not inconsistent with the provisions of the act; and in section 52, relied upon by respondent, as well, the new creation is referred to as "such new corporation." It is also a corporation created under a general law. At the time of its creation, section 1 of article 15 of the constitution provided that corporations might be formed under general laws, and that "all laws passed pursuant to this section of the constitution may be amended, altered or repealed." It was said in *Muller v. Dows*, 94 U. S. 444, of such a corporation, so formed: "The two companies became one, but in the state of Iowa that one was an Iowa corporation, existing under the laws of that state alone." In *State Treasurer v. Auditor General*, 46 Mich. 224, 9 N. W. 258, and *Chicago & N. W. Ry. Co. v. Auditor General*, 53 Mich. 79, 18 N. W. 586, the question was as to what portion of the earnings of the consolidated company was subject to taxation in this state. In *State Treasurer v. Auditor General* it was held that the Lake Shore & Michigan Southern Railway was not a corporation formed under the general railroad law, within the meaning of the clause of the statute providing for taxing railroad companies so formed. In *Chicago & N. W. Ry. Co. v. Auditor General* the same doctrine was held. It was said in the latter case: "We appreciate very fully the difficulty of determining under all circumstances in what light we are to regard the anomalous organizations which are formed by the consolidation of two or more corporations which have received their corporate powers from different sovereignties." The case of *Peik v. Railway Co.*, 94 U. S. 164, was cited with approval. In that case it was held that the state in which the road



lay may legislate for the consolidated company in that state precisely as before the consolidation. Neither of the two Michigan decisions determined what legislative control the legislature of the state has over that portion of the road which lies within the state, or as to the conduct of business within the state. And this may also be said of *People v. New York, C. & St. L. Ry. Co.*, 129 N. Y. 474, 29 N. E. 959.

The companies at present forming the respondent derived rights under the law permitting a consolidation, and, while there may be difficulty in subjecting so much of the property of the consolidated company as lies without the state to our jurisdiction, or in controlling the transactions of the corporation itself without the state, or in fixing taxation upon a basis which rests upon its earnings outside the state, it is not apparent why the company, as to its exercise of corporate functions within the state, is not subject to the terms of the act authorizing its consolidation, as limited by the constitutional provision in force at the time, or why it is not subject to local legislation. Counsel also cite the cases of *Tomlinson v. Branch*, 15 Wall. 460, and *Central Railroad & Banking Co. v. Georgia*, 92 U. S. 665. In the former case the act provided that, upon the written consent of all the stockholders of the South Carolina Canal & Railroad Company, the said South Carolina Canal & Railroad Company shall be merged in the said South Carolina Railroad Company. It was held that the South Carolina Railroad Company retained the rights which it had before the merger. The case of *Central Railroad & Banking Co. v. Georgia* was to the same effect. There the Macon & Western Railroad Company was merged under the name and charter of the said the Central Railroad & Banking Company of Georgia. But in *Railroad Co. v. Georgia*, 98 U. S. 359, it was held that, where a consolidation took place, the effect was the creation of a new corporation out of the stockholders of the two previously existing corporations. It was said: "The consolidation provided for was clearly not a merger of one into the other, as was the case of *Central Railroad & Banking Co. v. Georgia*, 92 U. S. 665." The question was raised in a case where this same defendant was a party in interest, in *Shields v. State*, 26 Ohio St. 86. In that case the court say: "Among the companies forming this consolidation were two Ohio companies, chartered and organized before the adoption of the present constitution, and whose charters were therefore not subject to the provision of the present constitution which gives to the legislature the power of alteration, amendment, and repeal of charters. \* \* \* The consolidation took place in 1869, and was effected in all respects in pursuance of the act of April 10, 1856; and the claim is that a consolidation under that act is to be regarded in law as a surrender or relinquishment of the several individual charters of the companies so uniting, and the acceptance of a charter *de novo* from the state." The court held that the consolidation constituted a new corporation, and the fact that it was formed out of old defunct corporations did not make it any the less a corporation created by the legislature. It was said: "It is not the material out of which it is formed, but the plastic hand that formed it, that we look to for its character and status under the constitution." This case was affirmed on appeal by the federal supreme court in 95 U. S. 319. The question was again before the federal court in *St. Louis & S. F. Ry. Co. v. Gill*, 156 U. S. 649, 15 Sup. Ct. 484. In that case there was a consolida-

tion of two railroads, operating in Missouri and Arkansas. It was claimed that, notwithstanding this legislation, the railroad company, so far as related to its business in Arkansas, was entitled to fix its rate of charges in accordance with the law of its original corporation. The court said: "It has been frequently decided by this court that a special statutory exemption or privilege, such as immunity from taxation or a right to fix and determine rates of fare, does not accompany the property in its transfer to a purchaser, in the absence of express direction to that effect in the statute;" thus treating the consolidation as a purchase by the new entity.

3. Passing by the third contention, and considering first the effect of article 19a, § 1, of the constitution, this section reads as follows: "The legislature may, from time to time, pass laws establishing reasonable maximum rates and charges for the transportation of passengers and freight on different railroads in this state," etc. The contention is that this section is a limitation upon the authority of the legislature, and that, as to the fixing of rates, the power is exhausted when maximum rates are established, and that the act in question is not a fixing of maximum rates within the constitutional provision. In the opinion of Mr. Justice Cahill in *Wellman v. Railway Co.*, 83 Mich., at page 624, 47 N. W., at page 499, it is said: "Nor do I think that the constitutional amendment of 1870, before cited, which expressly provides that 'the legislature may, from time to time, pass laws establishing reasonable maximum rates of charges for the transportation of passengers and freight on different railroads in this state,' is no more than declaratory of a power that already existed. \* \* \* The amendment of 1870 was neither a grant nor a limitation of power. It was a declaration of power already reserved in the constitution, and the amendment served only to put beyond question the right of the legislature, which was before thought to be open to debate." The maxim, "*Expressio unius est exclusio alterius*," is not wholly inapplicable in the interpretation of constitutional provisions. See *End. Interp. St.* § 533; *Cooley, Const. Lim.* pp. 78, 79. Speaking of this rule as applied to the construction of constitutional provisions, Mr. Justice Green, speaking for the court in *Williams v. Mayor, etc.*, 2 Mich. 563, said: "That certain legal maxims or rules of construction, which have been found generally applicable, afford important aid in arriving at the intention of those who framed the law, every lawyer will admit; but that there are some instruments or laws to which such maxims cannot be strictly applied, without doing manifest violence to the plain intent of the framers of the law, is also a matter of common experience. This is especially true in the construction of state constitutions, as will appear manifest when we consider their character and objects." See, also, *Com. v. Hartman*, 17 Pa. St. 118; *People v. Wright*, 6 Colo. 92; *In re Thirty-Fourth St. R. Co.*, 102 N. Y. 343, 7 N. E. 172. The constitution of New York placed certain restrictions upon street-railway companies. The legislature, by a general act, embodied the constitutional conditions, and annexed a third or additional condition not enjoined by the constitution. The contention was made that the constitution had prescribed the conditions upon which street railroads might be constructed, and, by implication, thereby enjoined the imposition by the legislature of conditions other than those prescribed

therein. The court of appeals of New York said: "But the constitution neither by express language nor by implication abridges the legislative power over the subject outside of the matters particularly enumerated. It needs no citation of authorities to sustain the postulate that, except as restrained by the constitution, the legislative power is untrammelled and supreme, and that a constitutional provision which withdraws from the cognizance of the legislature a particular subject, or which qualifies or regulates the exercise of legislative power in respect to a particular incident of that subject, leaves all other matters and incidents under its control. Nothing is subtracted from the sum of legislative power except that which is expressly or by necessary implication withdrawn. The legislature is prohibited from granting a franchise to construct a street railroad, except upon certain specified conditions. But it is not prohibited from annexing further conditions not inconsistent therewith, and whether other conditions are necessary or proper is a matter resting in the wisdom and discretion of the legislature." 102 N. Y. 343, 7 N. E. 176.

It is said that the statute having fixed the maximum rate of 3 cents as to certain roads earning less than \$2,000 per mile, and 2½ cents and 2 cents, respectively, for roads earning more than \$2,000 per mile, this exhausts the power of the legislature, and that no power exists to provide for a less rate where mileage books are used. In my judgment, the term "maximum rate," as used in this constitutional provision, means the maximum rate which the company is to be permitted to charge under a given set of circumstances. Under the terms of this act, the company not furnishing mileage books may be compelled to furnish them at the rate of 2½ or 2 cents a mile, respectively, or it may charge for the single fare 3 cents. By this same act all roads are entitled to charge 3 cents per mile for a distance not exceeding five miles. It might be said with as much force as the proposition under discussion can be urged that by this provision the legislature has fixed the maximum rate at 3 cents, and thereby exhausted its power. The answer is obvious, viz., that, in fixing the rate at 3 cents for a distance less than five miles (in the Lower Peninsula), the legislature fixed the maximum rate for that service to be paid the road by one making just that contract. If this answer is not valid, the court and counsel in the Wellman Case overlooked wholly a controlling question which would have ruled the case the other way from that in which it was decided. In the case of *Interstate Commerce Commission v. Baltimore & O. R. Co.*, 145 U. S. 263, 12 Sup. Ct. 844, section 2 of the interstate commerce act was under consideration. That section provides "that if any common carrier subject to the provisions of this act shall, directly or indirectly, by any special rate, rebate, drawback or other device, charge, demand, collect, or receive from any person or persons a greater or less compensation for any service rendered, or to be rendered, in the transportation of passengers or property, subject to the provisions of this act, than it charges, demands, collects or receives from any other person or persons for doing for him or them a like and contemporaneous service in the transportation of a like kind of traffic under substantially similar circumstances and conditions, such common carrier shall be deemed guilty of unjust discrimination, which is hereby prohibited and declared to be unlawful." The language of Judge Jackson,

of the circuit, was approved, as follows: "To come within the inhibition of said sections, the differences must be made under like conditions; that is, there must be contemporaneous service in the transportation of like kinds of traffic under substantially the same circumstances and conditions. In respect to passenger traffic, the positions of the respective persons or classes between whom differences in charges are made must be compared with each other, and there must be found to exist substantial identity of situation and of service, accompanied by irregularity and partiality resulting in undue advantage to one, or undue disadvantage to the other, in order to constitute unjust discrimination."

4. It is difficult to define the precise limit of power reserved to the legislature under a provision embodied in the fundamental law, or incorporated in the charter of a corporation, reserving the right to the legislature to alter, amend, or repeal. The question has been before this court in numerous cases, the latest being the case of *Attorney General v. Looker* (Mich.) 69 N. W. 929, where the authorities are collated. In the case of *Detroit v. Detroit & H. Plank-Road Co.*, 43 Mich. 140, 5 N. W. 275, Mr. Justice Cooley, speaking of the provision of the constitution of the United States which forbids the impairing of obligations of contracts, says that, but for this provision, "the power to amend and repeal corporate charters would be ample without being expressly reserved. The reservation of the right leaves the state where any sovereignty would be if unrestrained by express constitutional limitations, and with the powers which it would then possess. It might therefore do what it would be admissible for any constitutional government to do when not thus restrained, but it could not do what would be inconsistent with constitutional principles. And it cannot be necessary at this day to enter upon a discussion in denial of the right of the government to take from either individuals or corporations any property which they may rightfully have acquired." We think this is a fair statement of the effect of this reservation, and that, if the legislation in question can be construed as depriving the respondent of its property, it is invalid, as conflicting with other constitutional provisions. But we do not think that such is the effect of this legislation. It cannot be said that the right to use property dedicated to a public use in precisely the manner which the owner may choose to use it is a vested right of property. This question has been put at rest by a long line of decisions, beginning with *Munn v. People*, 69 Ill. 80, and including *Wellman v. Railway Co.*, 83 Mich. 592, 47 N. W. 489.

The chief contention is that because this statute requires the company to enter into contracts for future transportation of passengers, covering a period of two years, it is therefore withdrawing from the company the right to manage its own property, and is, for this reason, invalid. It may be said that every attempt to fix rates of toll or rates for the carriage of passengers or transportation of property to some extent involves an interference with the management and control of its property by the railroad company. Having in mind the common method of conducting railroad business at the present day, the court can take judicial notice of the fact that nearly every railroad in this state does issue, and did, prior to the enactment of this law, issue, mileage books or 1,000-mile tickets. The conditions were not precisely the same, but they were con-

tracts good for one year, and issued at a reduced rate; so that, in the usual conduct of business, time contracts for the transportation of passengers are made. In fact, it would be difficult to conceive of a method of conducting a railroad business which did not involve a contract good for some length of time.

In the brief of the learned counsel for the respondent we are cited to a large number of cases in which it has been held that it is competent for railway companies to make regulations limiting the time within which a ticket may be used, and this is undoubtedly true in the absence of legislation; but we think it cannot be successfully contended that it would not be competent for the legislature to provide that a ticket furnished to a passenger should be good for a definite reasonable time, and, when such legislation was adopted, it would of necessity deprive the company of the power to make rules inconsistent therewith. I confess I cannot share the apprehension that such a regulation as the one here involved will deprive the company of the management of its business. Would any one contend that the legislature has not the power to require railroad companies to keep on sale at their stations tickets of any kind? The compulsory requirement of this act may, indeed, be denounced as an attempt to conduct the business of the company, but I apprehend that extended argument is not necessary to defend the right of the legislature to make such requirement. In Elliott on railroads (section 1598) it is said that "in some of the states it is provided by statute that tickets shall be good for a certain number of years, notwithstanding any limitation thereon." I am not aware that these statutes have been attacked. If such enactment be within the power of the legislature, where is the line to be drawn short of that fixed by the federal supreme court, which is that legislation of this character must not be so unreasonable as to deprive the company of the use of its property? The only case to which our attention has been called in which the subject of legislation requiring the sale of mileage books has been under consideration is that of Attorney General v. Old Colony R. Co., 160 Mass. 62, 35 N. E. 252. The legislation there under discussion provided for an interchangeable mileage book, good on all the roads of the state. The court divided, a majority of the court holding such legislation to be unconstitutional, in that it required one company to do business upon the credit of another. The majority of the court distinctly limit the decision to that ground, and apparently did not find a regulation requiring the issue of mileage books to be unreasonable. Mr. Justice Knowlton, with whom Mr. Justice Holmes concurred, reached the opposite conclusion, and of necessity affirmed the power of the legislature to provide for the issuing of mileage books.

My conclusions are that the regulation is not unconstitutional as applied to roads within the control of the legislature, and that the respondent road, by its consolidation—formed, as it is, by a consolidation under an act passed since the enactment of the constitution reserving the power to alter, amend, or repeal,—is subject to the general control of the legislature, and that the judgment of the circuit court should be affirmed.

Long, C. J., and Moore, J., concurred with Montgomery, J.

Grant, J. (dissenting). By act No. 90, Pub. Acts 1891, the railroad law was amended, fixing the maximum rate for the transportation of passen-

gers at from two to three cents per mile according to the gross earnings of the passenger trains of the various roads. The same act requires all railroad companies in this state, or carrying on business partly within and partly without the state, to keep for sale, at their principal ticket offices, 1,000-mile tickets, to be issued in the name of the purchaser, his wife and children, and to be valid for two years, at the rate of \$20 in the Lower, and \$25 in the Upper, Peninsula. The relator tendered the respondent defendant, \$20, and demanded a 1,000-mile ticket, to be issued in the name of himself and his wife. The respondent refused to accept the money and issue the ticket, whereupon the relator filed a petition in the circuit court for the county of Lenawee, praying for the writ of mandamus to compel the issuance of the ticket. The court below granted the order, and the respondent appealed.

The constitution (article 19a, § 1) provides that "the legislature may, from time to time, pass laws establishing reasonable maximum rates of charges for the transportation of passengers and freight on different railroads in this state," etc. One of the railroads doing business in this state contested in the courts the validity of the above provision, fixing maximum rates. That provision of the law was held valid. *Wellman v. Railway Co.*, 83 Mich. 593, 47 N. W. 489. That decision held that the reasonableness of the rate was for the sole determination of the legislature, and not for the courts. The case was affirmed in the supreme court of the United States, that court, however, holding that the reasonableness of the maximum rate was for the determination of the courts, and not exclusively in the legislature, and that, whenever that rate was so low as to deprive the railroad companies of a reasonable income from their legitimate investments, the result was to deprive them of their property, or, what is the same thing, the use of it, without due process of law, and therefore void, under the constitution of the United States. *Railway Co. v. Wellman*, 143 U. S. 339, 12 Sup. Ct. 400. It is now the established rule that the question is a judicial one, and that, while the courts cannot establish the charges, they will inquire into their reasonableness, and determine whether the rates are such as to deprive the corporation of its property without due process of law. *Railway Co. v. Gill*, 156 U. S. 657, 15 Sup. Ct. 484, and authorities there cited. But the above decisions and many others upon the same subject which are cited in the briefs of counsel do not, in my judgment, bear upon the question now raised. All those cases involve the validity of maximum rates fixed by the legislatures under the implied or express power of the state constitutions. The difficulty which for a long time confronted the courts was not in determining whether the power to fix a reasonable maximum rate existed, but what was the limitation of the power. As late as 1893, the supreme court of Massachusetts, in *Attonery General v. Old Colony R. R.*, 160 Mass. 89, 35 N. E. 252, recognized the existence of the power, but said: "It is not yet settled, however, what the limitations of this power are,—whether it is limited to such rates as a court may deem reasonable, or only to such rates as shall not operate to deprive the railroad companies of their property without reasonable compensation or without due process of law." That question was settled in *Railway Co. v. Gill*, *supra*, decided the following year. We are cited to no case, nor

have I been able to find any, which involves a legislative enactment like the one now presented for our determination.

Several defenses are interposed, but I deem it important to refer to but one, which I think is conclusive against the relator, viz.: Does the legislature possess the power, under the constitution of this state, to enact this provision, requiring railroad companies to fix charges below the maximum rates, and compel them to enter into contracts for two years or for any number of years which the legislature may see fit to prescribe? The learned counsel for the relator contend that the power is inherent in the legislature to "regulate, control, and fix the conditions of all contracts between railroad companies and their patrons." They further say: "It is merely a regulation of the public business, which the legislature has a right to regulate. Its apparent object is to promote the convenience of persons having occasion to travel on the road, and to reduce for them the cost of transportation. Its benefit to the public, who are compelled to patronize railroads, is unquestioned. It brings the reduction of rates of two cents per mile within the reach of all persons who may have occasion to make only infrequent trips." No authority is cited which sustains so unlimited a power. If it be sustained, these companies have no control over their affairs and business except to carry out such contracts for common carriage as the legislature may see fit to prescribe. If the legislature may compel these companies to carry married men, their wives and children, at reduced rates, it may also include their servants and employes upon the same ticket, and also the transportation of their goods at reduced rates. It may require the issuance of these tickets to clubs of two or any greater number. It may fix excursion rates at still lower figures, and prescribe the time for which they may be valid. It may make such contracts valid for any number of years. And, under the relator's contention, the courts must determine in each case whether the requirements are reasonable. Certainly, citizens who have invested their money in these corporations are entitled to some control over their business and affairs. It is difficult to understand what control is left to them if this law be sustained. Under the opinion of the learned circuit judge who heard the case, he should have denied the writ. His opinion is against the judgment rendered. He used the following language: "Upon the other question I care only to remark that this particular provision of the statute, the aid of which is invoked in this case, if constitutional, would seem almost to extend the police power of this state to the practical management of the business of the railway companies, and leave no line beyond which it could be said that the state cannot assume to control what are practically the private business affairs of the corporation. And it certainly will not be contended in the present condition of the law that there are not elements of the business affairs of railroad companies with which the state has no more right to interfere than with those of private individuals. The state has assumed to exercise its police power over railroad companies upon the theory of protection to the public from injuries which might arise from improper construction of its road or rolling stock, or from faulty operation of them. Thus, it assumes to control the construction of its engines and cars so far as the question of the safety of persons using them may require, the operation of its trains

so far as it is necessary to protect the persons on them and those who may rightfully be upon its tracks, the grade at which they may cross one another, with the same idea in view, and as well the maximum rate of fare so far as necessary to protect the public from extortion; but mere questions of expediency have not been considered the subject of legislative control. Considerations of this nature would tend to lead me to the conclusion that this law ought not to be sustained, did I feel myself free to pass upon such a question." It was, in my opinion, the clear duty of the circuit judge to enter judgment in accordance with his convictions.

The constitution grants the legislature the right to fix a reasonable maximum rate. This excludes the power to fix any other rate. It affords the public ample protection against exorbitant and unjust charges. An affirmative grant of power often, though not always, implies an exclusion of other supervision upon the same subject. Mr. Story says: "The truth is that, in order to ascertain how far an affirmative or negative provision excludes or implies others, we must look to the nature of the provision, the subject-matter, the object, and the scope of the instrument. These, and these only, can properly determine the rule of construction. There can be no doubt that an affirmative grant of power in many cases will imply an exclusion of all others." Story, Const. § 448. Does not the express power to fix a maximum rate exclude the power to fix a minimum or any other rate? If this same act had fixed a minimum of two cents per mile, and prohibited the carriage of passengers at a less rate, would counsel contend for the existence of these powers? The result of such a provision would be to prevent railroads from giving cheap excursions, now so common, and which accommodate and benefit the people. The object of this constitutional provision is to prevent the imposition of extortionate or unreasonable charges, and to secure to the traveling public a just and reasonable charge, one which would give a reasonable return to investors, and a fair and reasonable rate to the public. The legislature performed this function by fixing 2, 2½ and 3 cents per mile as just and reasonable maximum rates. The public are thereby protected. Why should not all contracts within that rate be left to the railroad companies? Is not that a reasonable construction to be placed upon this clause of the constitution? If these companies choose to accommodate the public by offering reduced rates, by mileage, coupon, club, or excursion tickets, is not that within the reasonable maximum rate fixed, and a proper matter for their own control? I can find no reason or excuse for holding otherwise.

If, however, I am wrong in the conclusion that this express power inhibits the exercise of any other upon the same subject, I am still of the opinion that the act cannot be sustained under the police power inherent in the legislature under the constitution. The legislature does not possess all the powers not inhibited by the constitution, and, when one seeks to defend its acts under the police power, he must be able to show that the act is for the protection of the lives, persons, property, or rights of citizens, or to the safety and good order of society. The police power inherent in the legislature is not broad enough to cover every legislative interference with property or personal rights, upon the ground that there is no express inhibition of the power to be found in the constitution. Every person has the inalienable right to the possession, use, and control



of his property and business, so long as he observes the common-law maxim, "*Sic utere tuo ut alienum non lædas.*" The legislature may authorize municipalities to determine of what material the merchant or manufacturer shall construct his buildings within the city limits, to see that they are properly built, and that the plumbing, sewerage, etc., are sanitary. These things are essential to protect the health and lives of employes, patrons, and the public generally. The general public is interested, and hence the legislative interference with what are otherwise the natural rights of individuals is essential and necessary for the good of all. But if the legislature should attempt to fix the size of the building, the dimensions of its rooms, the price of merchandise to be bought and sold, when he should open or close his store or factory, and the terms of contracts he should make, the courts would not hesitate to declare such acts unconstitutional, notwithstanding no express inhibition can be found in the constitution. The common law secured these rights to the citizens, because their exercise created no injury to others, nor was of concern to the public. They were within the maxim above quoted. When the constitution was adopted, these common-law rights were preserved, and it was unnecessary to declare in the constitution that they remained sacred and intact, and that the legislature could not interfere with them. The constitution was adopted with reference to these existing rights, and impliedly inhibits the legislature from infringing upon them. Among these inherent rights of the citizen is the power to conduct his own business, and to make such contracts as he pleases. This right is the same whether the citizen be a natural or an artificial person. Only when the general public are concerned, for their own safety and protection, may the people, through the legislature, protect themselves against exorbitant charges or the conduct of business in a manner injurious to the public.

The constitution is entirely silent upon the subject of contempts; yet it is held that the legislature cannot take away this power from the courts, which has from the earliest time been inherent in them. In *re Cadwick* (Mich.) 67 N. W. 1071. We there said: "The constitution leaves this power existing in the court, as it was at the common law." So the constitution leaves to the citizen the control of his property and business, subject to the rules of the common law. "Constitutions are to be construed in the light of the common law, and of the fact that its rules are still in force." 3 Am. & Eng. Enc. Law, 679. Justice Cooley states the rule thus: "The limit to the exercise of the police power in these cases must be this: The regulations must have reference to the comfort, safety, or welfare of society." Cooley, Const. Lim. 577. Black says it includes "all such regulations as may be necessary for the safety and good order of society," and adds: "It is evident that the term 'police power' is a very flexible and comprehensive expression, and difficult of exact definition. But it must not be extended beyond its necessary and proper limits. When the police power has fulfilled the essential objects of its reservation to the state, it has also reached the boundaries of its legitimate exercise." Black, Const. Prohib. §§ 61, 62. Has it not fulfilled "the essential object," in this case by fixing a maximum rate? No claim is made that this maximum rate is not a sufficient protection to the public. Upon what principle of law or justice, then, can this pow-

er be invoked by the state to control contracts between its citizens which do not injuriously affect the public or any member thereof? If this legislation cannot be upheld under the police power (and, as already shown, this is virtually conceded), it logically follows that the legislature is vested with unlimited power to regulate and control the management of these corporations, solely because the constitution does not in express terms prohibit. This is a doctrine which, in my judgment, finds no support in authority or reason. Whether railroad companies should issue the tickets in question is a matter of little importance, but the establishment of a rule of control is of great importance. All roads issue 1,000-mile tickets. Some issue these family tickets, and some issue 1,000-mile tickets upon which any number of passengers may ride. When the police power is set aside, the door is open to the legislature to prescribe contracts of all kinds. This is well stated in the opinion of the circuit judge. A somewhat extended discussion of the question is therefore appropriate.

The general rule is not questioned that "the authority of courts of justice to declare void any legislative enactment must be found in express constitutional provisions, limiting legislative power." Text writers and courts have recognized that this rule has its exceptions, and that there are implied as well as express inhibitions. The learned author, Justice Cooley, after stating the general rule, says: "It does not follow, however, that in every case the courts, before they can set aside a law as invalid, must be able to find in the constitution some specific inhibition which has been disregarded, or some express command which has been disobeyed. \* \* \* The maxims of Magna Charta and the common law are the interpreters of constitutional grants of power, and those acts which by those maxims the several departments of government are forbidden to do cannot be considered within any grant or apportionment of power which the people in general terms have made to those departments." Cooley, Const. Lim. 174, 175. In the early case of *Calder v. Bull*, 3 Dall. 386, the supreme court of the United States said: "I cannot subscribe to the omnipotence of a state legislature, or that it is absolute and without control, although its authority should not be expressly restrained by the constitution or fundamental law of the state. The people of the United States erected their constitutions or forms of government to establish justice, to promote the general welfare, to secure the blessings of liberty, and to protect their persons and property from violence. The purposes for which men enter into society will determine the nature and terms of the social compact; and, as they are the foundation of the legislative power, they will decide what are the proper objects of it. The nature and ends of legislative power will limit the exercise of it. This fundamental principle flows from the very nature of our free republican governments: that no man should be compelled to do what the laws do not require, nor to refrain from acts which the laws permit. There are acts which the federal or state legislature cannot do without exceeding their authority. There are certain vital principles in our free republican governments which will determine and overrule an apparent and flagrant abuse of legislative power, as to authorize manifest injustice by positive law, or to take away that security for personal liberty or private property for the protection whereof the government was established. An act of the legislature (for I cannot call it a law) contrary

to the first great principles of the social compact cannot be considered a rightful exercise of legislative authority. The obligation of a law in governments established on express compact and on republican principles must be determined by the nature of the power on which it is founded. A few instances will suffice to explain what I mean: A law that punished a citizen for an innocent action, or, in other words, for an act which, when done, was in violation of no existing law; a law that destroys or impairs the lawful private contracts of citizens; a law that makes a man a judge in his own cause; or a law that takes property from A., and gives it to B. It is against all reason and justice for a people to intrust a legislature with such powers; and therefore it cannot be presumed that they have done it. The genius, the nature, and the spirit of our state governments amount to a prohibition of such acts of legislation, and the general principles of law and reason forbid them. The legislature may enjoin, permit, forbid, and punish. They may declare new crimes, and establish rules of conduct for all its citizens in future cases. They may command what is right, and prohibit what is wrong; but they cannot change innocence into guilt, or punish innocence as a crime, or violate the right of antecedent lawful private contract, or the right of private property. To maintain that our federal or state legislature possesses such powers, if they had not been expressly restrained, would, in my opinion, be a political heresy, altogether inadmissible in our free republican government." In *Durkee v. Janesville*, in discussing the power of the legislature to exempt the city of Janesville from the payment of costs in tax cases brought against the city when the city was defeated, the court said that they "care very little whether it is placed on those fundamental principles of law and justice which, in our form of government, it has been held no legislative body can override, even though not prohibited by the written constitution, or upon the provisions of the constitution itself, some of which clearly forbid the enactment of such laws." 28 Wis. 467. These two cases were cited with approval in a unanimous opinion by this court. *Wilder v. Railway Co.*, 70 Mich. 382, 38 N. W. 289. See, also, *Park v. Press Co.*, 72 Mich. 560, 40 N. W. 731. In the noted and leading case in this state of *People v. Salem*, 20 Mich. 452, it was vigorously urged by two eminent lawyers that the power of the legislature to authorize municipalities to pledge their credit for the construction of railroads was not expressly inhibited by the constitution, and therefore must be held to exist. The court took the opposite view, and in the majority opinion, written by Justice Cooley, said: "There are certain limitations upon this power not prescribed in express terms by any constitutional provision, but inherent in the subject itself, which attend its exercise under all circumstances, and which are as inflexible and absolute in their restraints as if directly imposed in the most positive form of words." Id. 473. It may be proper here to remark that that case held that "railroads are no longer public works, but private property. Individuals, and not the state, own and control them for their own profit. The public may reap many and large benefits from them, and, indeed, are expected to do so, but only incidentally, and only as they may reap similar benefits from other modes of investing private capital." 20 Mich. 485. See, also, page 489 of the same case. Justice Christiancy, a learned jurist, said in *People v. Jackson & M. Plank-Road Co.*, 9 Mich. 306: "Powers the exer-

cise of which can only be justified on this specific ground [the police power], and which would otherwise be clearly prohibited by the constitution, can be such only as are so clearly necessary to the safety, comfort, or well-being of society, or so imperatively required by the public necessity, as to lead to the rational and satisfactory conclusion that the framers of the constitution could not, as men of ordinary prudence and foresight, have intended to prohibit their exercise in the particular case, notwithstanding the language of the prohibition would otherwise include it."

Now, let us apply to the present case the rule given by Justice Cooley, that the "regulation must have reference to the comfort, safety, or welfare of society." Certainly, it does not affect or promote the comfort or safety of society, or any member of it. The learned counsel say: "Its apparent object is to promote the convenience of persons having occasion to travel." In what way does it promote this convenience? It can promote the relator's convenience only by permitting him to buy one ticket instead of two or more. This is too trifling a convenience to deserve consideration. I am not aware of any decision holding that mere convenience is a test for the exercise of the police power, but, if it were, the law would not regard the purchase of one ticket instead of two or more a public convenience. Counsel further say: "It brings the reduction of rates of two cents per mile within the reach of all persons who may have occasion to make infrequent trips." Do those "who have occasion to make only infrequent trips" constitute the general public? The provision is not for the benefit or convenience of those who travel on business, for it is the universal custom of railroads to issue 1,000-mile tickets to individuals. Obviously, it will not benefit the great mass of the people, few of whom would expend \$20 or \$25 at one time on a ticket. The sole benefit is a pecuniary one to the rich and well to do, who would purchase such tickets for visiting or pleasure. Counsel do not appear to seriously claim that the requirement comes within the rule above stated, but rest their contention upon the broad proposition that the legislature may absolutely control the management of railroad corporations, because they are engaged in a public business; that is, a business in which the general public are interested. The argument that this requirement of the statute is essential to "the comfort, safety, or welfare of society" refutes itself, and cannot be sustained upon the principle of inherent police power.

The argument of counsel logically leads to the conclusion that the legislature may manage and control the business of the railroads of this state just as fully and completely as it could if the state owned them. The state did once own three railroads, of which the respondent was one, and managed them. It did not make a success of the business, and sold them to private parties. Is it possible to hold that the state, by implication, reserved the exclusive right to manage, direct, and control them, and determine what contracts they should make, and then that the courts should determine whether they were reasonable? No such reservation is found in the articles of sale or in any law of the state under which other roads have been constructed. Upon what principle can courts read such reservation into the law? Neither legislatures nor judges are experienced in the business of running railroads. Why

should the former be authorized to make contracts for them, and the latter to determine their reasonableness, when such contracts have no "reference to the comfort, safety, or welfare of society?" The property of railroads is private property. Neither the state nor the public has a penny invested in them. Private capital has contributed every dollar to their construction and equipment. Their owners have built them for private profit, and not as public benefactors; otherwise, the Salem Case was wrongly decided. Railroad companies are common carriers, pure and simple. They are not public corporations in the sense that municipal corporations are public. They are termed "quasi public corporations" only because the general public may deal with them, are entitled to have themselves and their goods carried by them, and are therefore subject to those regulations which are necessary for the protection of the public. This proposition is well stated in the opinion of the learned circuit judge above quoted. The mere fact that the constitution and the statute have given these common carriers the power to obtain a right of way over private property by agreement or condemnation does not confer upon the legislature the power to control their management, as if they were the sole property of the state. Individuals, in their natural capacity, may build a railroad over their own lands, and over the lands of others, where, by agreement, they obtain the right of way, and may hold themselves out to the public as common carriers of freight and passengers. The public would have the same right in such a common carrier as they would have in a corporate common carrier organized under the general law of the state. The fact that a right of way may be condemned for the benefit of the common carrier, as well as for the public, cannot logically be held to make such common carrier a strictly public corporation, over which the legislature has the same control as it has over municipal corporations or over its own property. Article 15 of the constitution treats of corporations. Section 9 authorizes corporations, other than municipal, to take private property for public use; that is, a use in which the public have a public interest, and in which the private corporation has a private interest. Section 15 authorizes municipalities to take private property for public improvements. Section 14 of article 18 authorizes the taking of land for private roads. We need not discuss to what extent these provisions involve the exercise of the power of eminent domain. "Eminent domain is the right or power of a sovereign state to appropriate private property to a particular use, for the purpose of promoting the general welfare." Lewis, Em. Dom. § 1; 6 Am. & Eng. Enc. Law, 511. In its original and strict sense, it implies that the state takes the land, and compensates the private person for his damages. Grotius wrote: "When this is done, the state is bound to make good the loss to those who lose their property." It is now universally held that this right may be delegated to private parties, corporate or individual. But I submit that such delegation to private parties does not take away from them all their common-law rights, and vest them in the State, subject to the judgment of courts as to the reasonableness of the control exercised by the State.

It follows that the inherent power in the legislature to fix rates of carriage by railroads is based upon precisely the same principle as is the power to fix the rates to be charged by all common carriers, such

as hackmen, ferrymen, and other carriers of persons and of freight. No one would contend that the legislature could require hackmen or ferrymen or owners of omnibuses to enter into contracts with their patrons to carry them for two years at a rate below the amount otherwise fixed by law, or that they should carry married men and their families at reduced rates. The legislature of Illinois passed a law fixing a maximum charge for elevating and storing grain. The law was attacked as unconstitutional, but was sustained by the supreme court of the United States, upon the ground that the public had an interest in the business, and it was therefore subject to the control of the legislature so far as fixing the rates was concerned, thereby protecting the public from exorbitant charges. *Munn v. Illinois*, 94 U. S. 113. The same principle is the basis for the exercise of the police power in regard to railroads, elevators, hacks, ferries, etc. If the legislature does not possess the power in the one case to compel the party, whether natural or artificial, to enter into contracts for the future, neither does it in the other. This subject is so fully and exhaustively treated in both the majority and minority opinions in that case that I will not discuss it further; but, for the purpose of showing the basis upon which courts have sustained the legislative power to fix maximum rates, I quote the following from the majority opinion: "When one becomes a member of society, he necessarily parts with some rights or privileges which, as an individual not affected by his relations to others, he might retain. A 'body politic,' as aptly defined in the preamble of the constitution of Massachusetts, 'is a social compact by which the whole people covenants with each citizen, and each citizen with the whole people, that all shall be governed by common laws for the common good.' This does not confer power upon the whole people to control rights which are purely and exclusively private (*Thorpe v. Railway Co.*, 27 Vt. 143); but it does authorize the establishment of laws requiring each citizen to so conduct himself, and so use his property, as not unnecessarily to injure another. This is the very essence of government, and has found expression in the maxim '*Sic utere tuo ut alienum non lædas.*' From this source came the police powers, which, as was said by Mr. Chief Justice Taney in the *License Cases*, 5 How. 583, 'are nothing more nor less than the powers of government inherent in every sovereignty; \* \* \* that is to say, \* \* \* the power to govern men and things.' Under these powers, the government regulates the conduct of its citizens one towards another, and the manner in which each shall use his own property, when such regulation becomes necessary for the public good. In their exercise, it has been customary in England from time immemorial, and in this country from its first colonization, to regulate ferries, common carriers, hackmen, bakers, millers, wharfingers, innkeepers, etc., and, in so doing, fix a maximum of charge to be made for services rendered, accommodations furnished, and articles sold." The opinion cites *Allnutt v. Inglis*, 12 East, 527, in which was involved the right to charge arbitrary rates for storage, and quotes from the opinion in that case as follows: "But, though this be private property, yet the principle laid down by Lord Hale attaches upon it,—that, when private property is affected with a public interest, it ceases to be *juris privati* only; and, in case of its

dedication to such a purpose as this, the owners cannot take arbitrary and excessive duties, but the duties must be reasonable."

The act, moreover, seriously interferes with the power of subsequent legislatures to change and increase the maximum rate should the financial condition of the railroad companies appear to demand it. Thousands of contracts would undoubtedly have been made which would run two years after the act of a subsequent legislature increasing the rate. It is furthermore obvious that parties acting upon the probability of a repeal of the previous law, and the enactment of another increasing the rate, would purchase tickets by the thousand. The legislature could not annul the contracts made under the prior law. A contract valid when made is valid till executed, and the legislature could not annul it. If they make these contracts to extend over two years, I see no reason why they may not be made to extend over four, eight, or ten, nor do I see any grounds upon which courts could hold them unreasonable. It can make no difference whether a contract is entered into voluntarily or by a provision of the law. They are equally valid and binding. The State cannot direct that to be done which it could not do itself were it engaged in the business. If this railroad were owned by the State, as it once was, and the State should make such contracts extending over two or more years, it would be held to the fulfillment of its contracts, even if it were dishonest enough to attempt to repudiate them. It is immaterial that some railroad companies have issued tickets of the kind provided by this act, or that the respondent has issued 1,000-mile tickets to single individuals. The power of the legislature is not to be tested by the voluntary acts of the parties over whom control is sought to be exercised. Because common carriers have made contracts with their patrons, the legislature is not therefore authorized or justified in enacting that such contracts shall be made. The same rules of construction must apply as would be applied if 1,000-mile tickets had never been issued, and the legislature were attempting for the first time to compel their issuance. If the legislature possessed the power to so enact, subject to reasonableness, the fact that such contracts had been voluntarily made would be evidence of the reasonableness of the law compelling them, but is of no force whatever in determining whether the power exists. Probably, all railroad companies have issued excursion tickets at less than a cent a mile, and valid for a few days. Does this fact authorize the legislature to enact that such companies must give these excursions, and to determine how often, at what rate, and the time within which the tickets shall be good for passage? Is this within the constitutional power of the legislature, either express or implied, to protect the public from extortion by fixing reasonable maximum rates? The opinion of the court should be affirmed, but its judgment was erroneous, and should be reversed, and the petition dismissed, with the costs of both courts.

Hooker, J. I concur in the conclusion reached by my Brother Grant. Our constitution adopted in 1850 provides that "the legislature may, from time to time, pass laws establishing reasonable maximum rates of charges for the transportation of passengers and freight on different railroads in this State, and shall prohibit running contracts between

such railroad companies whereby discrimination is made in favor of either of such companies owning connecting or intersecting lines of railroad." Const. Mich. art. 19a, § 1. Acting upon this authority, the legislature fixed a maximum rate per mile for the transportation of passengers which the railroads might charge. The first attempt to do more was by an act which recognized the short haul, and allowed a higher rate per mile for short distances than for long. It is now proposed by the act under consideration to discriminate in favor of the passenger who shall purchase transportation in large quantities, by giving him a lower rate, and to give special advantages to men of family. Will the next step be a law requiring the sale of transportation for freight at a reduced rate to large shippers? Without discussing the propriety of discrimination by the railroad companies, based upon competition and common business principles, we may well doubt the validity of legislation requiring it. The interstate commerce act seems to have been designed to prevent the very thing that this law requires. I have doubts of the constitutionality of legislation which does more than to assure to any person the right of carriage upon payment of the ordinary lawful fare. Under the constitution, our legislature may fix a maximum rate, and, while the question of discrimination growing out of the long and short haul was not discussed, the validity of such legislation may be settled by the *Wellman Case*, 143 U. S. 339, 12 Sup. Ct. 400. I am of the opinion, however, that the legislature has no power to say that a ticket shall be sold to one man cheaper than to another, or that it shall have a broader effect, and therefore a greater value, to one than to another, depending upon a willingness to purchase the right to transportation in large quantities, or upon the fact that the purchaser has a family. It might as well be made to depend upon his age, occupation, poverty, or necessity, as upon his ability to purchase in quantities, or to have and support a family. Again, the word "maximum" cannot be ignored. It has some use in the constitutional provision. To my mind it excludes the power of discriminatory legislation, leaving it to the railroad companies to make lawful concessions to their patrons as their business interests may require or permit.

(NOTE BY COMMISSIONER.—For valuable legal opinion upon the subject of the special charter involved in the above case, and as well upon the validity and effect of other special charters, see *Commissioner of Railroads Report*, 1890, page lxix, the opinion being by Messrs. Atkinson, Carpenter, Brook and Haigh, attorneys-at-law, and ex-Judge Marston, of counsel.

See also valuable opinion prepared by the Hon. D. D. Aitken, attorney-at-law, and Mr. Fred H. Britton, as contained in the *Detroit Evening News* of dates April 29, May 2 and May 6, 1895; files of which paper can be found in the State Library at Lansing.

See also briefs of counsel for and against relator in the case of *Hazen S. Pingree versus the Michigan Central Railroad Company*, now pending in the Wayne County Circuit Court this date; copies of which can no doubt be obtained from the Clerk of the Court.)



**SUPREME COURT OPINION IN THE CASE OF MANISTEE & GRAND RAPIDS RAILWAY COMPANY VS. AUDITOR GENERAL.**

An important decision relative to the computation, assessment and collection of railroad taxes has been handed down by the Supreme Court of this State and the same is herewith given in full.

**MANISTEE & GRAND RAPIDS RY. CO. VS. AUDITOR GENERAL.**

Opinion filed December 15, 1897.

**RAILROAD COMPANY—TAXATION—ACT 174 P. A. 1891 CONSTRUED—FAILURE OF COMMISSIONER OF RAILWAYS TO COMPUTE TAX.**

The exemption in Act 174, Public Acts of 1891 providing that "the rate of taxation fixed by this act or any other law of this State shall not apply to any railway or railroad company hereafter building or operating a line of railroad within this State, north of parallel forty-four of latitude, until the same has been operated for the full period of ten years, etc., held not to apply to a corporation which organized and had entered into the construction of its line of road nearly two years before the time the act became operative, and, at the time the act took effect, had nearly two-thirds of its line in such condition that it was running trains over it and earning freight.

The provisions of Section 3358, Howell's Statutes as to the time when the Commissioner of Railroads shall compute the amount of tax due, is directory merely, and not mandatory as to time.

Where a Railroad Commissioner in former years has failed to compute the taxes, a change in the incumbent of the office, held not to effect the right of the State to have the computation of taxes to become due from a railroad company, made and filed.

The exemption in Act 174 Public Acts of 1891, applies to and relieves from taxation complete lines of railroad the whole of which have been built and operated since the act took effect, and not continuations of, or additions to, existing railroads.

Appeal from the circuit court for Manistee county; James B. McMahon, Judge.

Bill filed by the Manistee & Grand Rapids Railroad Company against Stanley W. Turner, Auditor General. From a decree for defendant, both parties appeal.—Modified and affirmed.

T. J. Ramsdell, for complainant (Hanchett & Hanchett, of counsel).

Fred A. Maynard, Attorney General, for defendant.

Moore, J.

Complainant filed a bill to set aside taxes assessed by the Commissioner of Railroads against the complainant company for the years 1891, 1892, 1893 and 1894.

A decree was entered in the court below setting aside the taxes for 1891 and 1892 and sustaining them for 1893 and 1894. From this decree both parties appeal.

The record shows, that the complainant company is situated north of parallel 44 of latitude, that its road is for the purpose of carrying

freight and that it is not a road for carrying passengers. It was organized Nov. 11, 1889, and in December of that year commenced the construction of its line of road which at the date of the institution of this proceeding was about thirty-one miles long.

The work progressed so that in August, 1891, about eighteen miles of track was laid and partly ballasted and the company began to haul logs for the owners of timber along the line of its road and to carry camp and mill supplies. Prior to October 2, 1891, it had hauled about five million feet of logs, and two hundred thousand pounds of mill and camp supplies. The road bed was in such condition at this time it was necessary to run the trains very slowly. Prior to October 2, 1891, the receipts for the traffic of the road amounted to about seven thousand dollars.

The complainant reported from year to year the business of the road to the Commissioner of Railroads. The official did not make or file with the Auditor General any computation of any tax against said complainant for the years 1891 and 1892.

In May, 1894, the then Commissioner of Railroads made and filed with the Auditor General a computation of taxes as due from the complainant, not only for the year 1893, but also for the years 1891 and 1892. A year later a like computation was made for the taxes of 1894. It is to set aside these taxes that this proceeding is instituted.

The taxes are assessed by virtue of the provisions of Act 174, Public Laws of 1891, which act took effect October 2, 1891. This act has a provision reading as follows: "Provided further, That the rate of taxation fixed by this act or any other law of this State shall not apply to any railway or railroad company hereafter building and operating a line of railroad within this State north of parallel forty-four of latitude, until the same has been operated for the full period of ten years, etc."

It is the claim of complainant that its line of road was not built and operated until the act took effect and for that reason it is exempt from taxation. In construing this statute it may be pertinent to inquire what is its purpose. It is a matter of common knowledge that the portion of Michigan lying north of parallel forty-four of latitude is much more sparsely settled than the southern portion of the State and does not offer so inviting a field for the investment of capital. It was undoubtedly the purpose of this legislation to encourage capital to invest in new railroad enterprises in the newer portion of the State. The complainant, however, was organized and entered upon the construction of its line of road nearly two years before the act became operative, and it can hardly be said the purpose of the act was to apply to corporations like the complainant.

Can it be said that the complainants' line of road is included in the phraseology of the statute when it says the rate of taxation shall not apply to "any railroad company hereafter building and operating a line of railroad?" As has already been stated, the complainant had entered upon the construction of its line of road nearly two years before this act took effect and when it took effect had nearly two-thirds of its line in such condition that it was running trains over it and earning freight.

"As taxation is the rule and exemption the exception, the intention to make an exemption ought to be expressed in clear and unambiguous terms, and it cannot be taken to have been intended when the language of the statute on which it depends is doubtful or uncertain.

"It is also a very just rule that, when an exemption is found to exist, it shall not be enlarged by construction. On the contrary, it ought to receive a strict construction; for the reasonable presumption is, that the State has granted in express terms all it intended to grant at all, and that unless the privilege is limited to the very terms of the statute, the favor would be extended beyond what was meant."

Cooley on Taxation, page 204.

Lake Shore & Mich. Southern Ry. Co. vs. Grand Rapids, 102 Mich. 374, 380.

We think it clear that the complainant is not within the exemption of the statute.

Complainants claim the the person who was Commissioner of Railroads holding office in 1892 and 1893 is the only officer authorized to make the assessment of the taxes of 1891 and 1892, and that the act of his successor in office in making the assessment of these taxes in May, 1894, was unauthorized and beyond his jurisdiction.

It is argued by counsel for complainant,

"The whole authority for making the assessment by the Commissioner of Railroads is found in I Howell's Statutes, sec. 3358.

The provision is explicit that he shall make the assessment on or before May 15, upon the report of the railroad company made for the preceding year.

The assessment so made becomes due as a tax on the first day of the following July. It then becomes a lien upon the property of the railroad company. Taxation is a proceeding which is adverse to the taxpayer and depends wholly upon statutory provisions. A tax lien cannot be created against the taxpayer's property except by a strict compliance with the provisions of the statute by the officers who assess or levy the tax. This is a fundamental law in taxation.

Cooley on Taxation, pp. 217, 218, 323, 324, 325.

25 Am. & Eng. Ency., pp. 76 to 79, 202.

Hoyt vs. East Saginaw, 19 Mich. 39 at 45, 46.

Scofield vs. City of Lansing, 17 Mich. 437, 446, 447.

Seymore vs. Peters, 67 Mich. 415.

The omission or neglect of the Railroad Commissioner to assess the tax on or before May 15, 1892, upon the report for 1891, or his omission or neglect to assess the tax on or before May 15, 1893, upon the report for 1892, would not make an assessment for such tax made upon the same report by the Auditor General a valid tax, for the reason that the statute confers upon the person holding the office of Commissioner of Railroads the power to assess the tax and confers the power upon no one else. If he omits to do his official duty no provision is made for its being performed by any one."

The logic of this reasoning is, that though the legislature has by express enactment provided for a specific tax, the amount of which can be determined by a simple computation, that its rights to the tax can be utterly lost because an administrative officer does not, through inadvertence or through misinterpretation of the law, or for any other reason, make the computation at the time when he is directed to do so by the statute.

The duty to make the computation required by the statute does not devolve upon the individual in his personal capacity, but it devolves upon the official. And though the computation which ought to have been made in the years 1892 and 1893 was not in fact made until 1894, it was made by the same official, though a different person, who made it as though it had been made at the time designated by the statute.

The rate of the tax was fixed by the legislature, the only effect of the delay so far as the complainant is concerned is that it has not been required to pay the debt due the State as soon as it would have been obliged to do if the direction of the statute had been followed.

We think the provision of How. Ann. Stat., sec. 3358, as to the time when the Commissioner of Railroads shall compute the amount of tax due is so far directory as to be brought within the decisions of this court in Attorney General vs. Supervisors, 30 Mich. 368, and Oceana vs. Hart, Id. 319. In the last named case there had been a failure by the board of supervisors to spread upon the roll delinquent taxes at the time provided by the statute, and in disposing of the case it was said: "The county is entitled to a return of money or delinquent taxes to the full amount of the tax levy, and the failure to have such a return rises out of the town treasurer's delinquency. By sec. 1105 of the Compiled Law, all losses sustained by such default are chargeable to the township, and the board of supervisors are required to add the amount to the next year's taxes. It is claimed the failure to add the sum to the next year's taxes leaves no future power in the board to require their collection, as the statute requires no action but for the next year. We have no doubt the time provision is directory and that a failure to act at once does not cancel the debt. It would require clear language to justify the inference that an obligation of this sort can be cancelled by such inaction."

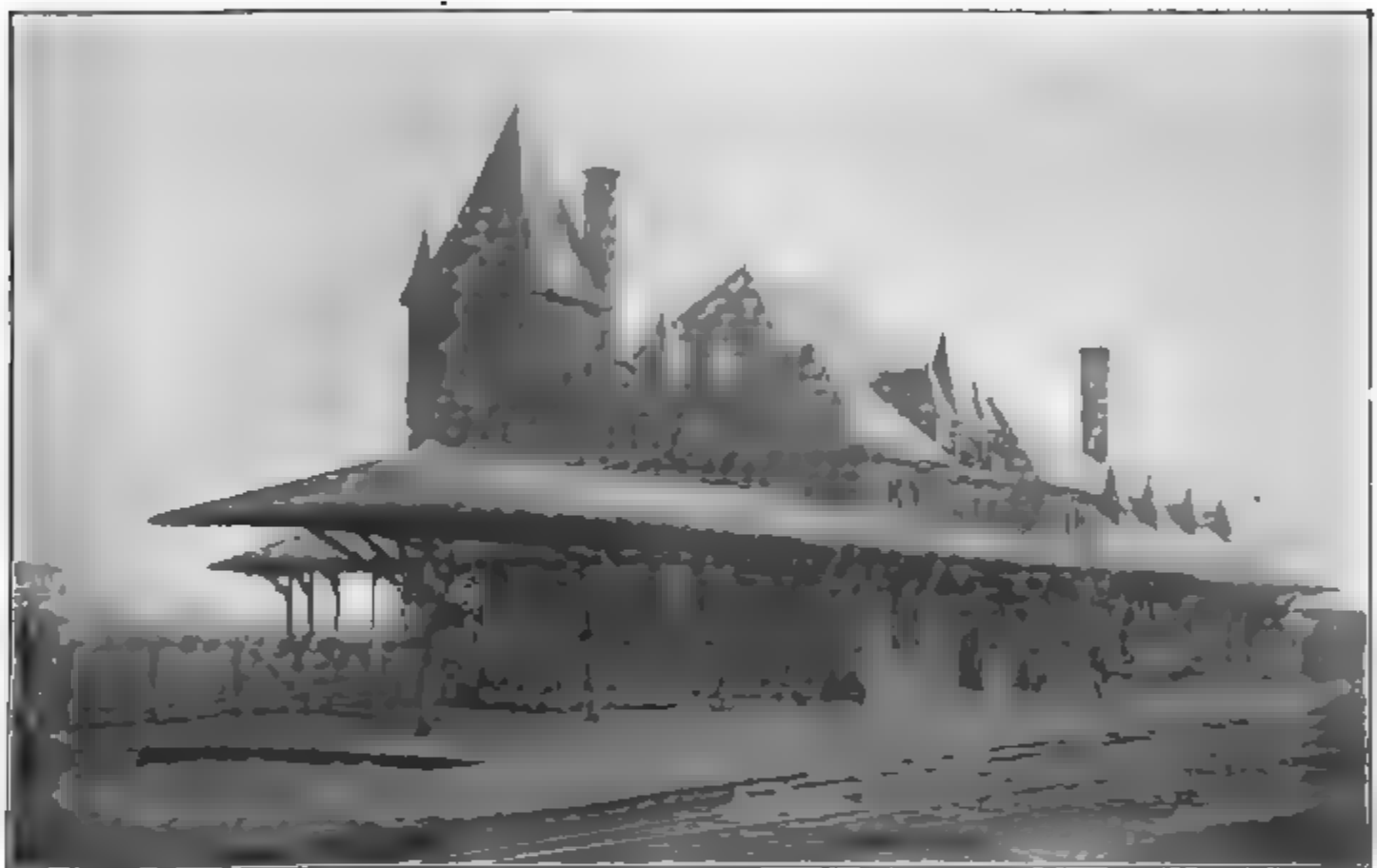
A debt due the State by the complainant cannot be cancelled by such inaction of the Commissioner of Railroads as was shown here.

See Cooley on Taxation, p. 289.

Sutherland Stat. Const., p. 575.

The complainant contends, that if the court finds from the record that the eighteen miles of road was so far completed as to take the road out of the exemptions of the statute, the decree should be modified so as to subject the road to taxes on the gross earnings of the eighteen miles only. The exemption mentioned by the statute refers to "a line of railroad" hereafter building and operated, and not to such portion of the line as may hereafter be constructed. It is evident that the line of road which the complainant expected to build when it was incorporated was the line which it has since built. The tax should not be confined to the eighteen miles, but should be assessed against the gross earnings of the line, a major part of which was constructed and operated when the law went into effect. The decree cancelling the taxes of 1891 and 1892 should be reversed and the bill dismissed with costs of both courts.

The other justices concurred.



M. C. R. R., NORTH SAGINAW



## CONCERNING THE STATE'S METHOD OF COMPUTING TAXES.

The present system of levying and collecting taxes on railroads in Michigan is followed in but few of the other states of the union. Nearly all the states have some form of taxation on values, but Michigan still clings to the peculiar system of taxes on earnings. To be sure, the railroad tax in this State is technically referred to in the law as "a specific tax upon the property and business of such railroad corporation operated within the State." But this specific tax is computed upon the gross income, and is in effect a tax upon earnings. These earnings are reported by the railroads themselves to the Commissioner of Railroads, and the latter simply does the clerical work of computing the tax. The machinery for collecting it is found in the Auditor General's and State Treasurer's office. The Commissioner of Railroads is required on or before the fifteenth day of May in each year, to make and file with the Auditor General a computation of the amount of tax which will become due on the first of July from each railroad company liable to pay taxes under the provisions of the tax law. The law requires that this computation shall be based upon the report of the railroad company for the preceding year, and provides, to, the penalty for a failure to file such report.

Under the present railroad tax law, a railroad company can, if it desires, practically fix the amount of its tax to suit its own pleasure. The truth of this is apparent when it is considered that each railroad reports its own earnings, from which the taxes are easily determinable by the application of the simple rules of percentage. If there is an effort on the part of a railroad to conceal any portion of its earnings, this effort will generally be rewarded by a reduction in the amount of taxes to be paid. It will be seen that in the case of interstate roads, a portion of whose line is in Michigan, some of the earnings that properly belong to this State could be easily concealed in such a manner as to make detection almost impossible; and even, too, in the purely Michigan roads concealment of part of the earnings is comparatively easy. It is almost impossible to discover errors or concealment, if any be made, without an enormous expense in the employment of experts. The scheme of railroad bookkeeping is so elaborate and intricate, especially in the case of interstate lines, as to preclude the possibility of making an investigation of the books that would prove of much real value. The earning reports of many roads have been very unsatisfactory in the past; but in nearly all cases investigations have only served to show the utter helplessness of the State in attempting to prove their inaccuracy. In some cases, however, the earnings have been so ludicrously small that the mere presentation of the matter to the railroad companies has caused them, voluntarily, to make some concessions to the State, though not large enough concessions to make their reports entirely satisfactory. The State has, in those cases, been compelled to take what the companies would give, and has been glad, indeed, when they showed a willingness to modify their reports in any way that would make them more satisfactory to the State.

Indeed, the statute, as now worded, makes it nearly, if not quite, impossible for the interstate railroad companies, without going to an

enormous expense, to keep track of the actual earnings of their roads in Michigan. For instance: If a parcel is shipped from Marquette over different systems to some point in the eastern or southern states and the total freight charged upon it to its destination would be \$1, it might be necessary for three railway systems in Michigan to calculate their respective share of their earning contained in the dollar; and, indeed, it is their duty under the statute in such case, to calculate the company's exact earning in carrying this parcel, making it necessary not only to divide this dollar with other railway systems outside of the State, but making it necessary to compute the Michigan earning and divide it among two or three systems of railroads in this State.

The statute leaves no room for an estimate of what the earning would be; it must be the actual earning, to be determined, therefore, by an exact calculation of the amount earned by each company in transporting either small articles or bulky freight. In the limited time given for investigating the matter, this department has discovered that railroad companies in their reports either estimate their Michigan earnings or include only such as are easy of calculation. Both methods being contrary to law.

It is true that the commissioner is given the power to examine into the condition and management of matters concerning the business of railroads in this State so far as the same affect or relate to the interest of the public and to the accommodation and security of passengers or persons doing business therewith; and that he is given power to examine books, papers, records and vouchers of railroad corporations in this State; power, too, to examine, under oath, directors, officers, managers, lessees, employes or agents of any railroad corporation concerning matters relating to the condition and management of the business of such corporation. But just to what extent he could exercise this power in the case of interstate roads with officers beyond the jurisdiction of the State courts, is a matter concerning which there is much doubt and difference of opinion; and even if he could exercise the power, it would be impossible without the expenditure of an enormous amount of money. Then, too, the time in which the commissioner has an opportunity to investigate these matters is totally inadequate for the purpose, if, indeed, any length of time would be sufficient to disprove the figures of the railroad companies when they might be unfair to the State. The railroads are required to make their reports to the commissioner on or before the first day of April. The commissioner is required to make his report to the Auditor General on or before the fifteenth day of May, so that it will be seen that only six weeks are given in which the commissioner can look into these books with a view to determine their accuracy. When it is considered that over eighty roads make reports, it will be seen how utterly inadequate the time is in which to make anything like a reasonable investigation of the accuracy of the reports. It must then be evident to any one who will take the facts surrounding the present system of railroad taxation into consideration, that the State is entirely at the mercy of the railroads in this matter, and that in the great majority of cases unless the reports are outrageously untrue, practically nothing can be done. And so long as this system of railroad taxation remains in force, this injustice must needs continue.



Below a table is given showing that the interstate roads that operate in Michigan do not give to this State her fair proportion of earnings, and for that reason Michigan does not get from these railroads the amount of taxes which, under the law, she should have. It will be noticed that a small percentage of the roads named below give Michigan a larger proportion of earnings than she would have if they were reckoned on a mileage basis. But in the case of the roads that make this showing, it will be readily seen that they are roads almost all the earnings of which must naturally, from their location, come from Michigan; and it is not at all reasonable to draw the conclusion that they have reported to this State any more than Michigan's fair proportion of taxes. But to be perfectly fair in the statement, we have in the table below given due credit for their larger proportion.

By act No. 129 of the Laws of 1893, the present system of computing the taxes was inaugurated. Prior to that enactment the law provided that in the computation of the taxes, companies doing interstate business should pay a tax in proportion to the "length of the operated road lying within this State compared with the whole length of the system." The table above given shows the injustice done the State, not only by the manner of reporting earnings, but by the enactment of the law above mentioned.

Without admitting that a system of taxation upon gross earnings without reference to the values of the property is just, I call attention to the injustice of the present manner of computation as applied to roads doing an interstate business. If the method of computation in vogue prior to 1893 was still in existence, and was applied to all roads given in the above table, the State would have received in taxes from the interstate roads for the year 1896, \$876,701.53, instead of \$584,269.45, and the total tax received from railroads would be \$1,034,463.18, instead of \$742,074.63.

These last figures do not take into consideration any inaccuracies or mistakes that might possibly have crept into the reports of earnings made by the purely local or Michigan roads.

From what has been stated above, it is apparent that the present system of taxing railroads is unjust:

First, Because it is inequitable as compared with the tax upon other property, and because it is unjust to tax one kind of property upon its earning capacity and refuse the same privilege to other property;

Second, Because the State, under the present law, is powerless to determine whether the earnings reported by the companies are accurate or not, the whole machinery for determining and reporting the same being practically within the control of the railroad companies;

Third, Because a partial control thereof by the State is inadequate to protect it;

Fourth, Because the system as applied to roads doing an interstate business is a usurpation of the power of congress to regulate commerce between the states, and to that extent is void;

Fifth, Because the legislature, by adopting a system of taxation relative to railroads in vogue either in New York, Massachusetts, Ohio or Indiana, or some of the other states, can do justice between the railroads and the State through a system which shall be simple, direct and just.

*Estimated tax figured on mileage basis.*

Railroads.	Total miles.	Miles in Michigan	Proportion for Michigan Per cent.	Total earnings	Earnings reported for Michigan.	Proportion of earnings reported for Michigan Per cent.	Earnings per mile, entire line.
Ann Arbor .....	302 73	296 73	98 05	\$1,170,750 35	\$1,026,167 17	87 65	\$3,408 83
Chicago & Grand Trunk .....	335 27	224	66 71	3,348,518 00	2,166,555 28	64 49	9,887 53
Chicago, Milwaukee & St. Paul .....	6,150 75	152 08	2 47	31,654,987 34	238,865 72	75	1,097 33
Chicago & Northwestern .....	5,030 75	521 19	10 36	32,177,152 81	2,093,694 80	6 50	6,396 06
Chicago & West Michigan .....	488 50	454 01	91 08	1,517,883 98	1,411,698 01	93 01	4,044 86
Cincinnati, Jackson & Mackinaw .....	414 49	190 87	46 05	707,088 38	327,081 03	46 26	1,730 64
Cleveland, Cinc., Chicago & St. Louis .....	1,804 74	35 14	1 94	13,011,462 62	131,064 12	10 07	7 078 71
Duluth, South Shore & Atlantic .....	588 33	475 03	80 74	1,838,212 73	1,741,171 49	94 83	4,239 38
Grand Rapids & Indiana System .....	584 79	442 98	75 75	2,065,614 54	1,775 088 11	85 95	4,151 65
Indiana & Lake Michigan .....	39 29	25 03	63 75	88,910 11	43,288 48	48 63	1,704 51
Lake Shore & Mich. South. Syst.* .....	1,419 66	75 27	39 98	20,548,769 31	2,048,482 24	9 97	14,028 89
Lima Northern .....	87 07	17 90	18 26	29,848 13	2,321 35	7 78	343 15
Michigan Central System .....	1,842 37	1,136 55	69 20	13,861,259 78	7,508,308 64	54 16	8 415 65
Minneapolis, St. Paul & St. Marie .....	1,188 71	199 23	16 78	3,719,906 13	780,869 85	20 99	3,102 58
Wisconsin & Michigan † .....	12 07	31 87	44 34	109,021 06	34,113 21	31 29	1,512 61
Wabash .....	1,979 60	80 50	4 06	12,158,125 95	347,806 67	2 86	6,178 76
<b>Total .....</b>	<b>22,159 15</b>	<b>4,856 52</b>		<b>\$138,084,599 25</b>	<b>\$21,669,186 72</b>		

Railroads.	Earnings per mile, for Michigan.	Michigan proportion of earnings, figured on mileage basis.	Michigan taxes based on earnings, figured on mileage basis.	Taxes actually paid in Michigan	Deficiency in amount of taxes actually paid as compared with taxes on mile age basis.	Surplus
Ann Arbor	\$3 458 28	\$1,14, 920 71	\$25,740 1	\$2,086 88	23 44 83	
Chicago & Grand Trunk	9,611 23	2,231 796 36	2,951 85	64 74 1	1,889 64	
Chicago, Milwaukee & St. Paul.	1,571 87	781 877 89	13 359 7	1 7 17	1,548 1	
Chicago & Northwestern	4,017 14	4,333 753 33	8 1 95	4 1 13	4 2 82	
Chicago & West Michigan	4,111 39	1,482,440 51	38 1 5	38 7 15		\$7 0 59
Cincinnati Jackson & Mackinaw	1,878 96	32 415 27	6 58 8	6 401 1	1 6 78	
Cleveland, Cinc. Chicago & St. Louis	3,729 78	152 4 2	6 72 48	2 35 1	3 37 17	
Duluth South Shore & Atlantic	7,741 18	1,564,311 96	4 72 7	38 18 98		4 18 46
Grand Rapids & Indiana System	4 067 1	1,564 33 03	4 687 7	39 28 92		4 341 15
Indiana & Lake Michigan	1,778 08	4 863 44	8 3 16	8 7 16		1 0
Lake Shore & Mich. South Syst *	5,634 00	8 255,087 97	10 67 71	71 771 47	188 904 29	
Lima Northern	147 99	4 75	9 11	46 1	4 7 8	
Michigan Central System	8 606 11	9 79 31 44	10 7 7	96 78 81	4 45 9	
Minneapolis, St. Paul & St. Marie	3 82 65	624,288 67	13 389 98	10 7 9 43		1 999 74
Wisconsin & Michigan...	1,098 05	48,339 94				
Wabash	4,310 78	491 619 91	18 134 9	9,114 43	8,979 0	
Total		\$81 657,780 1	\$876,800 75	\$84 68 4	\$46 1 1	\$1,317 29 54

Total tax, all roads, based on reports received ..... \$742,074 63  
 Total tax, all roads, based on mileage proportion ..... 1,034,808 43

\* In the above table the Lake Shore and Michigan Southern Railroad, heretofore taxed under a special charter, is treated as coming under the general law of taxation. This is justified by the provisions of act No. 123 of the session laws of 1891, and by the recent decision of the supreme court in the case of Smith vs. Lake Shore and Michigan Railroad Company.

† This road pays no taxes in Michigan, but the remainder of the system, extending into Wisconsin, pays taxes in that state.





C. & W. M. R.



., CHARLEVOIX



MICHIGAN'S RESOURCES AS BEARING ON THE SUBJECT OF PRESENT  
AND FUTURE OF MICHIGAN RAILROADS.

Few states are richer in natural resources than Michigan. These resources are being rapidly developed and afford a splendid field for the successful operation of railroad enterprises. The extent and variety of Michigan's resources are surprising, even to many of the best informed citizens of the State. The amount of her freight and passenger traffic will compare very favorably with that of other states. Michigan's position as a railroad state is often misrepresented, much to the detriment of the State. It is therefore a matter of special pride and gratification to be able to present some facts which cannot fail to disprove the false position that is sometimes taken. Throughout the discussion that follows, comparison is frequently made with the resources of neighboring states, for the purpose of giving as clear an idea as possible of Michigan's relative position.

Before giving any statistics, it may be stated in a general way that Michigan is first in the production of lumber, iron ore, charcoal pig-iron, gypsum, furniture, and fruit; first, too, in inland fishery and lake commerce. Michigan is also first in the number and variety of her summer resorts, which furnish a transportation business for railroads not enjoyed by companies operating in other states. She furnishes more than one-third of the entire copper product of the United States. In the value of her sheep and wool, she is only surpassed by Ohio and California.

Statistics will be given later to show her exact position in these various lines of industry.

## CENTRALLY LOCATED.

The shortest routes for the transportation of interstate commerce, both to the east and the west, are through this State. We refer to the three great trunk lines in this connection: The Michigan Central, Grand Trunk, and the Lake Shore & Michigan Southern railroads. Michigan has water facilities which compete, to some extent, with her rail facilities, yet she provides her railways, and especially such of them as extend their lines and connections to the far east, with the grains, timber, minerals, ores and manufactured goods of the northwest. This business is now being greatly increased by the introduction of the system of car ferry transportation, by which many lines heretofore local have been made through freight and passenger lines. Notably, the Flint & Pere Marquette, Ann Arbor, Chicago & West Michigan, and Detroit, Grand Rapids & Western railroads. Water transportation is by no means wholly a hindrance to freight transportation by rail, inasmuch as nearly, if not quite, all freight transported by water is carried also by rail to and from inland points.

## AGRICULTURAL RESOURCES.

Agriculture is the chief producing interest of the State, and still engages the largest portion of her people. It will undoubtedly continue to develop and will remain the chief producing interest for many years to come. Happily, however, Michigan, unlike most of her sister states, is not altogether dependent upon this interest for her wealth and prosperity. Yet, few states excel her, either in the volume of crops or in the quality of products.

Progress in the direction of the development of the State's agricultural resources has been very rapid indeed. The land area of the State is 36,361,919 acres, of which 15,296,076 acres have been occupied as farm lands, but only 10,379,515 of which are improved and tilled. There are 178,051 farms in the State. This shows an increase in a period of ten years of 18,442 farms, or 443,852 acres of land occupied for farming purposes. During the same time there was an increase of 1,404,859 acres in improved and tilled lands.

In the aggregate of farm crops, Michigan compares well with surrounding states, not alone in the amount of products raised, but also in the yield per acre. For example, Michigan's yield of wheat for 1896 was 17,861,999 bushels as against Wisconsin's 4,343,008, Ohio's 17,269,545, and Indiana's 24,574,853 bushels. This is an average of 12 bushels per acre in Michigan, and  $8\frac{1}{2}$  in Ohio and Indiana. For the year 1897, Michigan's wheat crop was 24,925,007 bushels, an increase of 7,063,008 bushels over the year 1896. Her yield of corn for 1896 was 81,733,087 bushels, or an average of  $68\frac{1}{2}$  bushels per acre. For the same year Wisconsin's corn crop averaged but 28, Ohio's 27 and Indiana's 37 bushels per acre. In 1896 Michigan produced 24,831,041 bushels of potatoes, Wisconsin 20,041,331, Ohio 12,852,147, and Indiana 7,107,809 bushels. Michigan's crop averaged 92 bushels per acre, Wisconsin's 80, and Indiana's 69.

It may be noted here that the greatest increase in agricultural resources has been in the northern portion of the State. Farms in the southern counties have decreased in value \$61,760,047; the value of their products has decreased to the extent of \$6,227,057; and the value of farm implements and live stock kept upon them has decreased \$758,606 and \$17,435.055, respectively, chiefly and perhaps solely on account of the financial depression. Notwithstanding this condition in the southern portion of the State, there was an increase in values in counties north of the 44th parallel, where railroads are exempt from taxation, \$8,248,215 in the value of farm lands; of \$3,734,052 in the value of farm products; of \$2,202,861 in the value of farm implements, and an increase of \$2,489,814 in the value of live stock.

These figures would seem to indicate that when the lumberman shall have finished his operations in the northern district of the State and shall have been followed by the thrifty and industrious husbandman, that portion of Michigan will rank well in the amount of its products with the fruitful southern counties of the State, and will furnish business to as many railroads as does southern Michigan.



**LUMBER.**

For many years lumbering has been the chief manufacturing industry of Michigan. While it may be admitted that the yield of pine has been greatly lessened, the impression that the supply has been wholly exhausted is entirely erroneous.

From the report of the Labor Commissioner's department for 1896 it will be seen that there remains standing 8,410,350 acres of land upon which no timber has been cut; and 8,326,477 acres of timber land upon which only a portion has been cut. It is immaterial what proportion of these lands are pine timber lands, inasmuch as the price of hardwood, owing to the scarcity, has increased greatly, and there is now a market for all that is left within the State. While there are no authenticated reports as to the exact magnitude of the lumber business in the State except for the year 1892, some idea of its extent and value as a commodity for transportation by rail and otherwise, may be gathered from the figures for that year. The enormous number of 2,140,800,000 shingles were produced. In addition to this, Michigan's forests yielded 3,794,256,754 feet of lumber, including much hardwood. At present a large portion of the lumber product is being manufactured in the State and the manufactured articles again shipped, thereby paying double tariff to the railroads for the transportation thereof, the most of it being consumed in the manufacture of furniture and other articles designated as woodenware.

There are engaged in the consumption of this forest product 178 furniture factories in Michigan, with \$10,000,000 of capital invested, employing more than 10,000 men, paying \$4,000,000 per annum for labor, using \$6,000,000 worth of material and turning out for the market more than \$12,500,000 worth of furniture.

Aside from the manufacture of furniture, there are located in the State, 8,842 factories engaged in other lines, with a capital of \$252,257,205 invested, paying \$60,188,150 yearly for labor, using \$125,743,139 worth of material, and turning out an annual product valued at \$237,857,772. For the same year Wisconsin's manufactured product was valued at \$218,132,973, and that of the state of Indiana at \$226,825,411. Indiana's factories employed but 124,349 men and had invested but \$131,605,366 in capital, and paid \$51,749,976 for labor.

**MINERAL RESOURCES.**

Few people realize the importance that Michigan has acquired as a mineral bearing state. Some idea of the magnitude of the mining industry of the State may be drawn from the fact that the value of Michigan's minerals for the year 1895 reached \$31,000,000, and in the year 1896 it exceeded \$34,500,000. Some additional mineral statistics are here given for the purpose of better pointing out the importance of this industry. For example, nearly 40 per cent of the domestic product of iron ore, and more than 10 per cent of the world's supply, is taken from Michigan mines. The world's product for the year 1895 was 59,-

035,000 tons; that of the United States, 15,957,614 tons, and Michigan for the same year yielded 6,063,267 tons. In 1896 there was produced in the United States 14,650,000 tons, of which Michigan furnished 5,448,696 tons, or upwards of 37 per cent of the entire output, some twenty-four other states contributing the other 63 per cent. Michigan's product for 1896 was marketed for \$17,459,146.

Although in the past twenty years more than 83,360,681 tons have been taken from her mines, still Michigan's iron fields are practically undeveloped, and in the near future she is bound to supply the world with her product. A noteworthy feature of the product of the iron mines of the State is the excellent quality of the ore produced, surpassing that of any other state. The percentage of iron will average 63, while the ore from the southern fields will fall 20 per cent below this. Michigan is producing large quantities of Bessemer ores. These are necessary for the manufacture of steel; and this adds wonderfully to the importance and value of Michigan mines since it is from these that the United States must secure its supply.

Of the 839,718,000 pounds of refined copper mined in the world in the year 1896, the United States produced 450,696,760 pounds, or more than one-half of the world's yield. During the same year 138,396,760 pounds, or 17 per cent of the world's product and more than 38 per cent of the entire product of the United States, was taken from Michigan mines. The yield for that year had a market value of \$15,057,567, or an increase of \$1,128,378 over the previous year. Several million pounds of this copper are being manufactured yearly by the rolling and wire-drawing mills in the State. The product of the Superior region is the purest and richest known, and excels all other in strength, toughness and conductivity, on account of which it ever finds a ready and open market at an advanced price in this and other countries. Because of the advancement made of late in electricity, the demand for Michigan copper has greatly increased. During the brief period that the Upper Peninsula mines have been in operation they have marketed 2,071,146,760 pounds of refined copper at a value of \$305,057,567; and during this time \$74,860,375 have been paid to the stockholders as dividends. Those for the year 1896 amounted to \$4,400,000. The yearly increase of Michigan's copper production is large and steady, amounting to about 5,000,000 pounds (and last year reaching 8,822,904 pounds). While much has already been done in our copper fields, there is yet much more to be accomplished. Only a small portion of the territory productive of the metal has been developed. The copper bearing formation is 130 miles long and from 3 to 15 miles wide. Upon this large tract the present working mines are embraced in 13 square miles, or less than one-eighth of the mineral bearing territory.

For years we have led all other states in the manufacture of charcoal pig iron. In the year 1896 the United States produced 310,244 tons, a gain of 84,903 tons over the previous year. Michigan produced in the same year 146,869 tons, which was an increase of 58,169 tons over the previous year's output. From this it will be seen that Michigan furnishes as much as all of the other states of the union combined, and that 70 per cent of the net increase of the production in the United States for 1896 came from Michigan.





M. C. R. R., COLUMBIAVILLE

The State bears the proud distinction of being first in the amount and quality of salt produced. In 1896 it marketed 3,968,344 barrels, which represents 26 per cent of the entire product of the United States for that year. The Michigan product is one that finds ready market throughout the entire country.

Michigan coal fields are becoming of great importance, and rapid progress is being made in their development. The yearly output now exceeds 50,000 tons. One-half of all the gypsum mined in the United States comes from Michigan; and in 1896 the yield amounted to 56,000 tons. Great interest is being taken in the quarry of sandstone, grindstone, granite, marble and slate, and these industries promise to be of great importance to the State in the future.

It has been claimed that the largest portion of Michigan's minerals are transported to the market by means of the great lakes, thus depriving the railroads of any benefit whatever from these resources, but the falsity of this position is apparent from the fact that there was mined in the State in 1896 but 6,500,000 tons of minerals, and the railroad reports for the same year show that they moved 13,695,268 tons. From this it is evident that the railroads not alone move the ore from the mines to the smelters and refineries, but also transport it from them to the ports and to the consuming market, thus realizing a double tariff on this product.

When one considers Michigan's undeveloped resources in connection with those already developed, her inexhaustible mines and minerals, her extensive manufactures and mills, her wealth in hardwood, her great amount of agricultural lands yet untouched by the settler, and her advantageous position with reference to consuming centers, a basis will be found upon which to predicate the future of the railroad interests in Michigan.

#### FREIGHT RATES.

The statute requires a report from this department as to whether a "classification of freight can be made, and if so, in what manner." The difficulties with which this matter was surrounded owing to imperfect data on file in the department as to the then schedules in force in the State, as well as the usual difficulties met by other states in an attempt to solve the question, made it a discouraging task. However, the legislature by resolution appointed a special committee to report a proper solution of the difficulties, the chairman of which committee, Hon. John F. Widoe, has kindly contributed to this report the result of the committee's investigation, and his conclusions therefrom and a method of solving the same, in the following article, entitled:

## DISCRIMINATIONS.

The design of the writer is to treat fairly and impartially matters coming under this branch of the Railroad Commissioner's annual report to the Governor. I am aware of the fact that Michigan has done much for the railroads, and in return the railroads have done much for Michigan. The railroad has not only brought our people and their industries together, but has carried civilization into a wilderness, which but for railroad facilities, would have remained wild for a century to come. It has played a graceful and important part in the advancement of the commercial interests of our State, and contributed handsomely to the happiness and prosperity of our citizens; and I truly and sincerely feel that in discussing the theme of railroad discriminations we are not warranted in making indiscriminate attacks upon corporations of a railway character and importance.

What the public really needs, wants and must have, is a logical and fair maintenance of an efficient, safe and reasonable transportation service, with rates and classifications adjusted equitably and fairly; a rate that is remunerative for the railway, and legitimate and fair to the shipper, and an application of such rates and classifications that will insure the identical same rate to a shipper located at a producing point where there is no competitive line of railroad to consuming points, as to a shipper located at a producing point having competing line of railroad to consuming point. We must have tariffs and classifications absolutely free from discrimination in favor of any community, corporation, company or individual; a rate that is fair, and guarantees a profit to the railway; a rate that is a rate today, and tomorrow; a rate that is a rate year in and year out. Just how to reach this beautiful standard of excellence and put into force and honest effect a tariff rate of such model perfection, is the question that is today perplexing both statesmen and railway managements.

Discrimination, as defined by Webster, is "the arbitrary imposition of unequal tariffs for substantially the same service." Hence, a difference in a tariff or rate must necessarily be based upon a reasonable corresponding difference in the cost for service rendered; and when the rate charged is different and not so based, such rate or tariff is a discriminating one.

The statute of Michigan (Howell, 3355) referring to discriminations, embraces under the side heading "Discrimination in rates forbidden," the following:

"No railroad corporation shall in any manner discriminate in its rates of freight tariff, in favor of any individual, company, or corporation doing business over its line of road, and shall grant the same rights and privileges to all shippers, subject to the same rates and classification, without rebate or any other special privilege or rate not extended to all other shippers in the same class, who ship a like quantity or quantities. Any railroad corporation refusing to comply with any of the provisions of this section shall be liable to a penalty not exceeding five hundred dollars."

By the provisions of this section, it would appear that there is plenty of law for the punishment of wilful discriminators in the application of freight tariffs, rates and classifications. The objectionable provision in this section is, "who ship a like quantity or quantities." This provision has been, and is today, construed by railroad corporations as being an open and lawful permission to make special or lower rates to large shippers,—wholesale shippers,—than to smaller shippers.

A great many of the more important grievances and complaints that came to the hands of the special railroad investigating committee of last winter were the direct product of this apparently discriminating provision. Wholesale rates, under this provision, were extended to large shippers in Michigan, and those favors by virtue of this provision were extended, and a lower or special rate made; and that, too, in my opinion, without discriminating intent. Naturally, smaller shippers would hear of these lower rates, and be prejudiced; and would insist that they were being wronged, and indiscriminately and unjustly dealt with. Attempts have been made to justify a statutory provision of this character upon the theory and practice among merchants, whereby they give better prices in wholesale than they do in retail dealings. On this point the courts have held that "the cases are not analogous, since the naming of a quantity of freight that shall be compared to wholesale purchase must necessarily be altogether arbitrary; and the duty of impartial service which railroad companies owe the public will preclude special discriminations being determined by arbitrary tests."

Ought "who ship alike quantity or quantities" be permitted to stand on our statute books? It certainly paves the way for favoring of large shippers and large capital engaged in manufacturing pursuits. It is a channel through which railroad corporations may accord special privileges to large shippers; and an open permit of this character will always (and rightfully, too) be construed as an unjust, unfair discrimination, if not an unlawful one. This provision certainly will admit of transactions that are contra to sound public policy, a violation of that principle of equality of rights guaranteed to every citizen, and must certainly if perpetuated, work a wrong and an injustice to every small capitalist engaged in manufacturing industry.

The varied correspondence received last winter by the special railroad investigating committee of the legislature of 1896-7, embraced complaints along lines as follows:

- Making better rates to large shippers than to small ones;
- Excessive rates;
- Discrimination in granting stop-over privileges on through billings;
- Stations located on competing lines of railroad receiving better facilities and rates than stations situated at non-competing points;
- Rates for short haul excessive in proportion to rate for long haul;
- Weights at initial station ought to control, etc.

I shall not attempt to treat in detail the various subjects complained of. I will say, however, that most of the complaints were based upon the complainants understanding of what was sufficient and good cause for grievance, and they sincerely felt that they were being discriminated against and unfairly treated by their railroad management. I am happy, however, to be able to say to you, at this time, that in the localities

where the more important violations and more serious complaints came from, that the railroad companies are now doing their best to accord even, just and equitable treatment to all their patrons alike.

I am fully and thoroughly of the opinion that the legislature has the power to pass appropriate laws prohibiting railroad corporations from granting special favors to any shipper; to prohibit excessive charges, and prevent discrimination in freight rates, tariffs and classifications. I also appreciate, and realize the fact that it is commonly recognized as impracticable to regulate by an elaborate system of legislation the duties of railroad corporations to the State. The one great thing in the way that, in a degree, handicaps legislative regulations, is that too much legislation has been, and is, guided by a spirit, on the part of legislators, to make legislation of a general character, conform to and rotate around their own district; their own factory; their own town; their own railroad; their own mine; their own lake or work shop.

In considering a problem so broad, and covering such a varied and wide range of interest as the regulation of the freight traffic of a great State, when the general welfare of the country is to be considered, the interest of the many instead of the few to be legislated for, it behooves legislators to lay aside local prejudices, view the commercial interests of all, rise to the plane of a statesman in the noblest sense of that dignified distinction.

In conclusion, and in the light of the many objections standing in the way of, and impeding a satisfactory regulation of freight traffic in Michigan by direct legislative provisions, let me recommend that you take under consideration the advisability of saying in your report to the Governor, that you favor the creation of a commission, to be known as "The Freight Tariff Rate and Classification Commission"; and ask the legislature to clothe said commission with such authority as would permit the exercise, through them, of the necessary control over the railroad corporations of Michigan in the conduct of freight traffic rates and classifications, and the application thereof. Let the commission be composed of men who will have the successful promotion of the commercial interests of all at heart more than any personal political advancement,—men with ability to aid and advise with the legislature for the construction of good sound business laws; laws based upon sound business logic and principle; laws that can be lived up to by all; laws that do not force railroad corporations to be law-breakers in order that they may maintain an existence. When this is accomplished the cry of "favored shipper" will die away; "unlawful discriminations," "excessive rates," "special favors," will be a thing of the past. Legislatures will be able to meet and do business. There will be no unremunerative railway tariffs or rates, no unjust or vicious shifting of classifications. All differences of this character would be wiped out, and made just, fair and equal. The railroad would be permitted to enjoy business profits. The small wholesale shipper would enjoy, and have accorded him, the same rates and facilities as the large wholesale shipper. The agricultural localities having a local market with but one line of railroad, will have the same advantage and equal facilities and rates to consuming points as localities having local market where competition in railroad facilities exist. Small capitalists, engaged in manufacturing pursuits, will have the same advantage,



and same rates in the transportation of their product to distributing centers as does the large capitalist.

I believe that the proper application of the State commission system, will prove an equitable and logical solution of the freight traffic problem.

JOHN F. WIDOE.

#### SEPARATION OF STEAM RAILWAYS AND PUBLIC HIGHWAYS AT CROSSINGS.

In view of the constant menace to the lives of persons, and to property at grade crossings,—as well to the property of the public as to that of railway companies, much interest has been manifested in many states of the union, and especially in the more densely populated eastern and northeastern states, in the subject of the separation of grades. The interest taken in the protection to lives and property at these crossings, has increased in proportion to the increase of the population, and to some extent to the casualties occurring thereat.

In 1893 the legislature of this State first manifested its interest in the subject matter by the passage of an act to provide separate grades for railroads and public highways and streets where railroads intersect such highways and streets. Some proceedings were instituted to separate certain grades in the city of Detroit under this act, but nothing has been accomplished except to determine the necessity therefor on one or two streets. This act was amended by act No. 143 of the session laws of 1895, and although two years have elapsed since its going into effect, no permanent results have been obtained.

#### NUMBER OF CROSSINGS IN MICHIGAN.

There are in the State of Michigan 8,112 crossings, 542 of which are protected by gates or flagmen, and 60, by electric or automatic signals; at 242 of them the grades have been separated voluntarily by the companies, leaving 7,268 of these crossings at grade and unprotected either by watchmen or gates.

The number of crossings is constantly increasing, both from the extension of railroads and by the improvement of hitherto unoccupied lands along the tracks of the different companies.

It is costing the railways of this State over \$250,000 per annum to protect 542 crossings out of a total of 8,112. Watchmen and gates are required largely in cities and densely populated communities.

Battle Creek has 15; Bay City, 20; Detroit, 103; Grand Rapids, 49; Kalamazoo, 26; Saginaw, 36; from which figures it will appear that nearly one-half of the watchmen stationed at crossings are required in the six cities named. It is safe, therefore, to presume that action for separation of grades should be begun in the cities of the State; and perhaps at its inception, a well-formulated and well-executed plan for the separation of grades should be confined to these localities.

The importance of this question as evidenced by the number of deaths and injuries at grade crossings, is demonstrated by a report upon the sub-

ject of deaths and accidents at grade crossings for a period of ten years, extending from 1887 to 1897. During that period there were killed at grade crossings, 187 persons, and there were injured at grade crossings, 193 persons. Statistics as to the amount of property destroyed at the crossings,—of the public and of the railroad companies—have not been kept; but it is apparent that the amount is not inconsiderable.

#### ADVANTAGE TO THE TRAVELING PUBLIC AND TO THE RAILROAD COMPANIES.

By a separation of grades in cities, the general public would be greatly benefited by an increased speed of trains in going into the cities, now limited to from four to eight miles per hour by ordinances passed by the municipalities, and in most cases strictly enforced, with such limitations thereon as provided by the statutes of the State.

#### THE PRESENT ACT CUMBERSOME.

After a careful perusal of the law governing the subject of this State and upon consultation with parties interested in the separation of grades and after a comparison of the act with provisions upon the subject in other states, it will be found that our statute upon the subject is cumbersome, and that the proceedings to be taken thereunder are involved in much machinery that makes it difficult of execution, and as well very expensive to both the municipalities and the railway companies seeking the benefit thereof. The worst feature of the act seems to be that it can only be executed, according to its provisions, after an attempt has been made by a railroad company to agree with a municipality on the different matters involved in it, and in the separation of grades; and after failure to make such an agreement, the making of which, of necessity, consumes much time and much expense and much labor, then the municipality or twenty freeholders owning property upon the highway affected, may petition the Railroad and Street Crossing Board to take action. Owing to this defect, largely in the one or two attempts which have been made to separate grades within this State, nearly a year has been consumed in an attempt to make an agreement, and much valuable time has been lost. If the separation of grades at any point in Michigan is a public necessity, all hindrance to a speedy determination of all the questions involved should be removed, and the proper authority should act upon a petition presented by a municipality or by the residents upon a street affected, or by a railroad company.

#### EXPENSE OF SEPARATION.

The chief question involved in a separation of grades is the expense attendant upon it. Damages may be awarded to the abutting property owners damaged thereby; to the railroad company or the street railway company operating in the streets. Then, too, the question of the division of expense between the company or companies and the municipal-

ity is a matter that must be adjusted. The query has also arisen in many states, and been answered, as to what proportion of the expense, if any, should be borne by the state.

Of the sister states, the commonwealth of Massachusetts has undoubtedly obtained the most matured system and machinery. The Massachusetts act provides that the cost of construction shall be divided between the municipalities, the state, and the railroad company, in the following manner: Ten per cent thereof to be borne by the municipality; twenty-five per cent thereof, by the commonwealth, and sixty-five per cent, by the railroad company. Where the street crosses above the railroad tracks the expense of maintaining the structure below the street, is borne by the railroad company, and the expense of that portion of the structure used by the traveling public as a highway, is borne by the city. Under this law, passed in 1890, there had been expended in the state of Massachusetts up to the first day of January, 1897, \$6,147,923.09, of which the commonwealth had paid, \$1,536,980.77.

In most instances the railroad companies are first to seek the benefits of the act.

Whether this division of expense is equitable and just could be best submitted to the legislature, having in mind that no positive rule applicable to all localities should be adopted.

In many instances street railways occupy the streets and highways at the point where a separation of grades is sought. Under the present police regulations, the street railway companies are put to considerable expense, and to a loss of time in determining that it is absolutely safe for their cars to cross steam railroads.

It is also within the jurisdiction of the Commissioner of Railroads to order the street railway companies to put in safety devices at their intersection with steam railroads; and it has been the policy of the present administration of this department to require safety devices at all such points of intersection. It is therefore reasonable in a division of the expenses of separation of grades, to take into account the benefits arising therefrom to the street railways occupying the highways, and to cause them to bear a portion of the expense of the separation.

With a view to simplifying the law in this State upon the subject and introducing harmony into its provisions which now seems to be lacking, and as well to introduce into it the legislation of other states, based upon their wider experience, I submit herewith a proposed statute upon the subject to serve as a guide in securing positive and effective legislation with reference thereto.

**AN ACT to provide separate grades for railroads and public highways and streets where railroads intersect such highways and streets.**

**SECTION 1.** *The People of the State of Michigan enact, That where any railroad crosses or shall hereafter cross any public street or highway, the separation of the grades at such crossing shall be accomplished under the provisions of this act.*

It shall be lawful to accomplish the separation of grades at any public street or public highway in this State by agreement with the proper officers of the railroad company crossing said street, and which said

agreement shall be made between said company and the persons named in this section under the separate sub-divisions thereof.

(a) Where said crossing is within the limits of any city by the common council of said city.

(b) Where said crossing is within any county outside the limits of any city and upon any State or territorial road, by the board of supervisors of said county.

(c) Where said crossing is within any county outside the limits of any city and upon any county road, by the board of commissioners of county roads, provided for in section forty-nine of article four of the constitution.

(d) Where said crossing is within any township outside the limits of any city and upon any township road, by the township commissioner of highways.

(e) Where said crossing is on the line between any city and the territory outside such city as follows:

1. Where the crossing is on a State or territorial road, by the joint action of the common council of the city and the board of county supervisors.

2. Where the crossing is on a county road, by the joint action of the common council of the city and the board of commissioners of county roads.

3. Where the crossing is on a township road, by the joint action of the common council of the city and the township commissioner of highways.

(f) Where the crossing is on the line between two or more counties, or between two or more townships of the same county, by the joint action of the boards of county supervisors, boards of commissioners of county roads, or township commissioners of highways, according as the crossing is on a State or territorial road, a county road or a township road. Or judicial proceedings may be instituted to obtain such separation of grades in accordance with the provisions of section ten of this act. The words "representative board or officer," where occurring hereinafter, shall be understood to mean board or boards of supervisors, board or boards of commissioners of county roads, township commissioners or commissioners of highways, common council, or any two or more of them, as the case may be.

SEC. 2. Such representative board or officer, as the case may be, may enter into an agreement with any railroad company or companies crossing any such street or highway providing for the separation of the grades at such crossing by carrying said street or highway either over or under said railroad at the point of intersection. Said agreement shall have attached thereto as a part thereof, an accurate profile and map of those portions of the street or highway and railroad or railroads of which the grade is to be changed according to said agreement and a plan showing the details of construction necessary for the separation of the grades at such crossing. Said agreement shall also provide for paying the cost of making and maintaining such separation of the grades and for the division of the total expense thereof between the parties to such agreement, and shall fix the amount of damages, if any, to be paid to said railroad company or companies as compensation for any injury to it or them resulting from said changes of grade, exclusive of the expense of con-

struction and maintenance above provided for: Provided, That no such agreement shall be enforceable until the damages referred to in section three of this act are fixed by judicial proceedings, or by compromise under said section three: Provided further, That no agreement made by a board of county supervisors, board of county commissioners of highways, or township highway commissioner which necessitates the borrowing or raising by tax of a greater sum by the county or township than such board or commissioner is authorized to raise, shall be enforceable until the authority to raise such excess has been duly given; nor shall any agreement made by a township commissioner of highways be valid until the same is approved by the township board: Provided, however, That the entering into said agreement or attempt to enter into the same by any party affected by the separation of said crossing, shall not be a condition precedent to the separation of said grades under the provisions of this act, or to an institution of proceedings to effect such separation.

SEC. 3. The mayor and common council of any city, the president and trustees of any village, a majority of the township board of any township within which a street, avenue or highway crosses or is to be crossed by a steam surface railroad at grade, or the president or general manager of any steam surface railroad company whose road crosses or is crossed by a street, avenue or highway at grade, may bring their petition in writing to the board created under the provisions of this act, therein alleging that public safety requires an alteration in the manner of such crossing, its approaches, the method of crossing, location of the highway or crossing, the closing of the highway crossing, the substitution of another therefor not at grade, or the removal of obstructions at the site of such crossing, and praying that the same may be ordered, and which said petition may also be filed by not less than twenty property owners upon said street; and upon the filing of said petition, as aforesaid, it shall be the duty of said board to proceed in such manner as they are directed in the provisions of this act.

SEC. 4. The Governor, within ten days after this act shall take effect, shall appoint, by and with the advice and consent of the Senate, two persons who, together with the Commissioner of Railroads, shall constitute a Railroad and Street Crossing Board. Said board shall have and keep their office at the office of the said Commissioner of Railroads. One of said persons so appointed and to be named shall hold office until the first day of January, in the year of our Lord, one thousand ..... and until his successor is appointed and qualified. At the regular session of the legislature next thereafter and every two years thereafter, the Governor, by and with the advise and consent of the Senate, shall appoint one member of said board, who shall hold office for the term of four years from the first of January in the year of his appointment and until his successor is appointed and qualified.

SEC. 5. No person shall be appointed as a member of said board who is not a citizen of this State, and who, at the time of his appointment, is in any way connected with any railroad corporation, and who is directly or indirectly interested in any stock, bond or other property of, or is in the employ of any railroad corporation, and no person so appointed shall, during the term of his office, become interested in any stock, bond or other

property of any railroad company, or in any manner be employed by or connected with any railroad corporation.

SEC. 6. The Governor shall have power to remove for cause any such member, and appoint another to fill the vacancy at any time in his discretion, but the reasons for such removal shall be laid before the Senate at the next regular or special session of the legislature thereafter, and in case of a vacancy in the office of any such member, the Governor may appoint another person to fill the same.

SEC. 7. Before entering upon the duties of his office the person so appointed shall make, subscribe and file in the office of the Secretary of State, an oath of office in the form prescribed by section 1, article eighteen of the Constitution of this State, and shall enter into bonds with the people of the State of Michigan in the sum of ten thousand dollars, with sureties to be approved by the Governor conditioned upon the faithful performance of his duties.

SEC. 8. Each of said members, other than the Commissioner of Railroads, shall receive as compensation the sum of ten dollars for each and every day spent in the performance of his duties. He shall be reimbursed for all actual cash outlay for railroad and hotel fares, and other expenses incurred in the performance of his duties. His bills for services and expenses shall be audited by the Board of State Auditors and paid from the State Treasury.

SEC. 9. Upon filing the said petition mentioned in section three of this act, and within five days thereafter, said board shall cause a notice of the filing thereof, together with a certified copy thereof to be served upon the mayor of the city affected by said petition or the president of any village, or the supervisor of any township, and upon the president or general manager of any railroad company whose road crosses or is crossed by the street, avenue or highway at grade, described in said petition. And where said highway is located between any two of the municipalities therein mentioned, then the same shall be served upon the representative officers herein named of said municipalities. Said notice accompanying copy of said petition aforesaid, shall also contain the notice of the time, and place of hearing of the said petition, which hearing shall be not less than twenty days from and after the time of the service thereof.

If the board or a majority thereof determine that a separation of grades is necessary, they shall determine whether the grade of said railroad or railroads shall be raised or lowered, and how much, and whether the grade of said street or highway shall be raised or lowered, and how much. And having determined the manner of making such separation as they or a majority of them shall deem best, they shall also estimate as near as may be and determine the cost and expense of doing and constructing the work. To assist said board in determining upon and making said plan, profile, map, estimates, and the report herein mentioned, they may employ an engineer and such clerical assistance as they may need. The expense of such employment shall be audited and paid upon the certificate of the president of said board, in the same manner as provided for their other expenses. They shall adopt a plan showing details of construction necessary for the separation of grades at such crossings by carrying such street or highway either over or under said railroad or railroads, as they or a majority of them shall deem best. They shall

make or cause to be made an accurate profile and map of those portions of the street or highway and railroad or railroads of which the grade is to be changed. They shall estimate as near as may be the cost and expense of doing and constructing the work to be done in a separation of said grades, and in the absence of statutory provisions governing the same, they shall determine the division of the cost and expense thereof, and what proportion thereof shall be borne by the city, county or township, the street railway or railways effected thereby, and the steam railroad or railroads affected thereby, and which report so made by them shall be signed by them or a majority thereof, and a copy thereof filed with the records of said board, and hereby directed to be kept in the office of the Commissioner of Railroads of this State; and copies thereof shall be served upon the railroad companies, street railway companies and municipalities affected by said report, in the same manner and form as is provided by law for the service of processes upon said parties.

SEC. 10. It shall be the duty of the corporation, municipality, person or persons upon whom said report of said board, together with decisions and recommendations accompanying the same, shall be served in accordance with the provisions of this act, to act upon said decisions and recommendations, and carry the same into effect under the provisions hereof, within thirty days after the service of a copy of said report and decisions as in the preceding section provided; and in case of either failure or neglect so to do, the board shall present the facts in the case to the Attorney General who shall thereupon take proceedings to compel obedience to the decisions and recommendations of said board, by mandamus or otherwise: Provided, however, that the institution of proceedings in accordance with the provisions of this act by one of the parties upon whom copy of said proceedings has been served, shall release all other parties so served as aforesaid from the duty to commence said proceedings enjoined upon them by the provisions of this section.

SEC. 11. It shall be the duty of the municipality served with said copy as aforesaid, through its city attorney or other legal advisor to forthwith prepare and file in the name of the county, township or city, in the court having jurisdiction in the proceedings, a petition signed by him in his official character, and duly verified by him, to which petition certified copies of the resolution, proceedings, determination, findings and recommendations of said Railroad and Street Crossing Board, shall be attached and annexed, and which certified copies shall be prima facie evidence of the action taken by said board or officers, and of the proceedings prior thereto, and of the regularity thereof. Said petition shall be filed in the circuit court for the county in which said highway or highways mentioned in the proceedings of said board is located: Provided, That in cities having a recorder's court proceedings shall be instituted and prosecuted in that court; and in cities having a superior court and no recorder's court, such proceedings shall be instituted and prosecuted in said superior court. The petition shall state that it is made and filed as commencement of judicial proceedings by the county, township or city, as the case may be in pursuance of this act, for the purpose of separating the grades of the street or highway and railroad or railroads at their intersection, designated by any proper descriptive words, in accordance with

the plan set forth in said resolution, certificate or report, as the case may be, referring thereto, and for making just compensation to all persons sustaining damage thereby, shall give a description of the property abutting on that part of said street or highway of which the grade is to be changed, also a statement of the manner in which said property and any street railroad line on said street or highway will be affected by said change and to what extent, and shall state that said representative board or officer or said Railroad and Street Crossing Board, as the case may be, has declared it necessary for the public benefit, to make said separation of grades in accordance with the plan set forth in said resolution or certificate or in said report, as the case may be, shall contain the names of the railroad companies and street railroad companies to be affected by the proposed change, and of all persons interested as mortgagees, lessees, or otherwise in the property of such companies, of the owners and others interested in the property, abutting on that portion of said street or highway of which the grade is to be changed so far as the same can be ascertained, including those in possession of the premises, and in cases where the crossing is of a class embraced in clause (e) or (f) of section one of this act, the name of the city or of the county or counties, township or townships interested, other than the county or township in whose name the proceedings are taken, as the case may be. If the name of any person interested in any of the abutting property is unknown, the petition shall state the fact and the interest owned by such person or persons. All persons, corporations and bodies politic and corporate, so named in said petition, shall be made parties respondent in said petition. Said petition shall ask that a jury be summoned and empaneled to ascertain and determine whether it is necessary for the public benefit to make such separation of grades in accordance with said proposed plan and to ascertain and determine the just compensation to be made to the persons interested in said abutting property. And to assess the compensation, cost and expense by them awarded against the city and county or counties, township or townships, company or companies, as the case may be, that are parties to the proceedings, as provided by law. Upon receiving such petition, it shall be the duty of the clerk of said court to issue a summons against the respondents named in said petition, stating briefly the object of said petition and commanding them in the name of the people of the State of Michigan to appear before said court at a time and place to be named in said summons not less than twenty nor more than forty days from the date of the same, and show cause, if any they have, why the prayer of said petition should not be granted.

SEC. 12. Said summons shall be served by the sheriff, under sheriff, or a deputy sheriff of the county, or in proceedings pending in the recorder's court or superior court of any city, by any member of the police force of such city, at least five days before the return day thereof upon all the respondents found within the county by exhibiting the original and delivering a copy thereof to each of them. If any respondent who is a resident of the county, cannot be found, the summons shall be served by leaving a copy thereof at his usual or last place of abode with some person of suitable age and discretion. If any minor or person of unsound mind is a respondent, service may be made on the guardian of such person, if there



be one, and if there is no guardian, the court may appoint some discreet and proper person to be guardian of such person in such proceedings; and such guardian shall have the authority to represent such person in such proceedings, and the proceedings to appoint such guardian shall be the same as provided in chapter two hundred four of the compiled laws of eighteen hundred seventy-one of the State of Michigan. If it shall appear on the return day of the summons that any respondent cannot be found within the county and has not been personally served, or is a non-resident, and such respondent has not voluntarily appeared, or if the name of any person interested is unknown, the court may make an order for the appearance of all respondents who have not been personally served and have not appeared, at a date not less than thirty days from the date of such order, and that service be made upon them by publishing a copy of such order, at least once in each week for three successive weeks, before the date set for said appearance, in a newspaper printed, published and circulated within the city or county as the case may be, and if there be no such paper, then in such paper as the court shall consider to be the most generally circulated within the city or county. Alias and pluries summons may be issued and the court may adjourn the proceedings from time to time as there shall be occasion and as in other civil cases. The return of the officer upon the summons and an affidavit of due publication of the order for appearance, if any, shall be filed in the office of the clerk of the court before a jury shall be impaneled and such a return of personal service shall bind the respondents and unknown parties in interest and the property in which they are interested.

SEC. 13. On the return day of the summons or on some subsequent day to which the proceedings are adjourned, if no sufficient cause to the contrary has been shown, the court shall make an order that a jury shall be impaneled in the cause to ascertain and determine the necessity for the public benefit of separating the grades of said streets or highways, and of said railroad or railroads at their intersection, in accordance with said proposed plan, and to ascertain and determine the just compensation to be made therefor to the street railroad companies, if any, and persons interested in the abutting property made parties respondent to said petition, and to assess the costs and expenses by the act to be assessed as provided herein.

SEC. 14. Such jury shall be composed of twelve freeholders of the city or county, as the case may be, and shall be selected and impaneled as follows: The sheriff shall select at least twenty-four persons, freeholders of said city or county, from whom a jury shall be impaneled in the cause, and the names of said twenty-four or more persons having been selected and returned by the sheriff, as directed by said order, the court shall thereupon cause such persons to be summoned by the usual process of venire to attend the court on a day to be named in said venire to serve as jurors, and the court shall then adjourn all further proceedings on said petition till the return day of said venire. Said venire shall be served by the sheriff or his deputy as in other like cases. On the return day of said venire, or on the day to which the proceedings may be adjourned, the court shall proceed to impanel a jury of twelve disinterested freeholders from persons so drawn and summoned. And if such jury cannot be found from the persons who shall attend upon such summons, or if so many of

the persons summoned shall be excused or shall be rejected by the court upon challenge or otherwise that there shall not be a sufficient number left to constitute a jury, the court shall order the sheriff of said county forthwith to summon immediately other freeholders of the said city or county to attend as jurors, until a panel of twelve qualified jurors shall be obtained. In impaneling a jury the practice and proceedings shall be the same as in ordinary civil suits so far as practicable. Four peremptory challenges shall be allowed to the petitioner, and the respondents who are the persons interested in the abutting property and any street railroad company shall collectively be entitled to the same number. If any juror, after being sworn, shall die or become unable to discharge his duties, the court may appoint another qualified person to serve in his place, who shall be sworn and take his place upon the jury, or may, in its discretion, impanel a new jury.

SEC. 15. The jury so impaneled shall be sworn or shall affirm that they will justly and impartially ascertain the necessity of separating the grades of said street or highway and of said railroad or railroads as proposed in said petition, and if they deem that such necessity exists that they will impartially ascertain and determine the compensation to be made to the parties respondent and unknown parties in interest named in said petition. The jury shall hear the proofs and allegations of the parties and the arguments of counsel and if so ordered by the court to go to the place of intended improvement, and in charge of an officer, and upon, or as near as practicable, to any property claimed to be damaged in making the same and examine the premises. They shall be instructed as to their duties and the law in the case by the court, and shall retire in charge of an officer and render their verdict in the same manner as on the trial of an ordinary civil case. The testimony given shall be reported, all objections made and the rulings of the court thereon, the exceptions taken being noted by the regular court stenographer and the charge of the court or instructions given to the jury shall likewise be reported by him. The jury shall report in writing as to each distinct parcel of land and as to each street railroad company claimed to be damaged and the interests in the same separately, and when all is finished, bring the report into court, and the same shall be filed with the clerk. A disagreement of the jury as to one or more distinct parcels of land shall not affect their report as to any lands in regard to which they have agreed, and upon such disagreement the court may upon motion of the petitioner, with a view to further proceedings, permit the petition to be so amended as thereafter to relate only to the premises affected by such disagreement, and to the persons interested therein, and may also cause a new jury to be drawn and impaneled, which new jury shall be drawn and impaneled in the same manner as above provided for the drawing of the original jury, and like proceedings as above provided shall thereupon be had, as to the lands concerning which there was such failure to agree and such new proceedings may be ordered by the court as often as may be necessary. The court may allow the jury to take with them when they retire, proper descriptions of the land claimed to be damaged as well as maps of the same and of the premises adjacent thereto and showing the proposed improvement and such other papers as the court in its discretion may deem it proper for them to have, including forms of verdict containing

a description of the property and the names of the occupants or owners or other persons interested therein, and in which they may find necessary to make the proposed improvement as aforesaid, or may not find it necessary to make such improvements, such forms to be made under the direction of the court, or the verdict may be prepared by the jury. The verdict of the jury may be set aside by the court and a new trial ordered for objections of law and for matters of substance, but not for objections as to matters of form, and in the same manner and on the same ground as an ordinary civil action in courts of general jurisdiction. The court may, before the jury is finally discharged, refer their verdicts and findings back to them, for the correction of any errors, defects or insufficiencies therein contained. The verdict of the jury shall be in writing and shall be signed by them.

SEC. 16. The jury shall in their verdict ascertain and determine the necessity for the separation of the grades of said street or highway, and of said railroad or railroads, as proposed in said petition. And if they find that such necessity exists they shall then ascertain and determine the amount of damages to such property as may be damaged thereby, and also to any street railway so damaged and shall award to the parties interested compensation for such damages. If any property damaged shall be subject to a mortgage or lease, or to any lien or estate or interest otherwise arising, they shall apportion the compensation awarded among the parties interested therein as they shall deem just. In case the owner of any interest in any property damaged is unknown, they shall determine the compensation for damages to such interest and the same shall be paid into court for the benefit of such persons. They shall state separately the several amounts of damages by them awarded, and any apportionment of damages among different interests by them made. The amount of cost and expense which it would be just and equitable that the city, county or township should pay to said railroad company or companies, for the doing and construction of the work to be done by it or them, and determined by said crossing board and stated in their report as provided by said section nine, and the amount of cost and expense which it would be just and equitable that said company or companies should pay to the city, county or township for the work to be done or constructed by the city, county or township, and determined by said crossing board and stated in their said report shall be final and conclusive. And the said jury shall assess in their said verdict the total compensation by them awarded for damages for such property as may be damaged by such improvements to the parties interested therein and to any street railroad company, and also assess the amount determined by said report of the crossing board to be paid by said city, township or county, as its fair share of the expense of the work to be done by said railroad company or companies, when the crossing is within the limits of the petitioner, against the petitioner, and in all other cases against the city, and county or counties, township or townships, as the case may be, that are parties to the proceedings in equal shares. Said last mentioned amount to be assessed in favor of and to be paid to said railroad company or companies. And they shall likewise assess against the said railroad company or companies and in favor of and to be paid to said city, county or township the portion of the cost or expense, which it was determined by said crossing board

would be just and equitable, that said company or companies should pay to the petitioner or other body politic to whom the same are awarded in the report of said crossing board. Amendments either in form or substance may be allowed in any paper, petition, resolution, process, record or proceeding, or in the description of property damaged or claimed to be damaged or in the name of any person whether contained in the resolution or certificate of the representative board or officer, in the petition of property owners or in the report of railroad and street crossing board or elsewhere, wherever the amendment will not interfere with the substantial rights of the parties. Any such amendment may be made after, as well as before the order confirming the verdict of the jury. Motions for a new trial or to arrest proceedings shall be made within two days after the rendition of the verdict unless further time is allowed by the court. And if no such motion is made, or if being made, is overruled, the court shall enter an order confirming the verdict of the jury, containing a recital of the substance of the proceedings and a description of each parcel of real estate for damages to which compensation is awarded, with the statement of the interest of any unknown party therein, and the name of each railroad company, street railroad company, municipality, or other party in interest in the proceedings to whom compensation for damages is awarded or to whom any of said costs or expense may be awarded or against whom the payment of any sum by said jury may be charged or assessed, which order shall also direct by whom, to whom, and in what time the payment of the sums awarded is to be made and said order of confirmation, unless reversed by the supreme court, shall be final and conclusive as to all persons interested therein.

SEC. 17. Any party to said proceedings, considering himself aggrieved, may appeal from the order of the court confirming the verdict of the jury, by filing with the clerk of the court a written notice of such appeal within five days of the confirmation, and within the same time serving a copy thereof upon the attorneys of the adverse parties, and filing a bond in said court, to be approved by the judge thereof, conditioned for the prosecution of said appeal, to judgment and payment of all costs, damages and expense that may be awarded against him in case the judgment of confirmation shall be affirmed. Such appeal shall be perfected within the same time and prosecuted in the same manner as appeals under the general act for taking private property for public use in cities and villages. In case of such an appeal the clerk of the court, on payment of his legal fees and charges, shall transmit to the supreme court a certified copy of the necessary files, records and proceedings in the case, and the judge of the court shall, at the request of the appellant, settle a case according to the usual practice of said court, showing the material evidence and instructions given to the jury bearing upon any disputed points to which exception is taken, and the objections, rulings and exceptions in the case, all of which shall be returned by said clerk as part of the records to the clerk of the supreme court.

SEC. 18. The said appeal may be brought on for a hearing at any term of the supreme court, and said court may affirm, or for any substantial error reverse the judgment, and may grant a new trial. The said court shall allow the prevailing party his reasonable costs and expenses to be taxed, and give judgment as in chancery appeals, and all costs, damages

and expenses awarded to the city, township or county, if it so elect, may be applied on or deducted from the compensation, if any to be paid, or execution may issue on the judgment. Damages may be awarded against a party appealing without reasonable cause.

SEC. 19. The total compensation for damages and expenses, if fixed by agreement, settlement or compromise, under the provisions of sections two and three of this act, or if fixed by a jury, such total compensation less the total amount assessed against the railroad company or companies as hereinbefore provided, shall be paid by the city, township or county in whose names the proceedings are instituted, except in cases where some city, county or township is a party respondent, in which case it shall be paid by the city and county or counties, township or townships that are parties to the proceedings, as the case may be, in equal shares. Any sum assessed against any railroad company, as hereinbefore provided, shall be paid by such company to the petitioner.

SEC. 20. When the verdict of the jury shall have been finally confirmed by the court, and the time in which to take an appeal has expired, or if an appeal is taken on the filing in the court below of a certified copy of the order of the supreme court affirming the judgment of confirmation, it shall be the duty of the clerk of the court to transmit to the common council of the city, when a city was a party to the proceedings, and to the county clerk of each county, and to the township clerk of each township that was a party to said proceedings, a certified copy of the verdict and of the judgment of confirmation, and of the judgment, if any, of affirmance; and thereupon the proper and necessary proceedings in due course shall be taken for the collection of the sum or sums awarded by the jury.

SEC. 21. If the common council of any city which has been such party believe that either a portion of said city in the vicinity of the proposed separation of grades, or any street railroad company which owns or operates a line, any part of which is within said city, and which was a party to such proceedings, or both such portion of the city, and any such company or companies will be especially benefited by such separation, they may, by an entry in their minutes, provisionally determine that the whole or any just proportion of that part of the compensation awarded for damages and expenses which is apportioned to said city, shall be assessed upon the owners or occupants of real estate, or upon such company or companies, or upon both such portion of the city and such company or companies deemed to be thus benefited; and thereupon they shall, by resolution, provisionally determine the district or portion of the city benefited, if any, and the amount to be assessed upon the owners or occupants of real estate therein, or upon said company or companies or upon both. The assessment district and the amount to be assessed having been thus provisionally determined, said common council shall fix a date for the hearing of persons objecting to the constitution of said assessment district, and to the amount to be assessed, and to the assessment of said company or companies, and shall cause a notice to be published once in each week, immediately preceding said hearing, for three successive weeks in a newspaper printed, published and circulated in the said city, or if there be no such paper, then in such newspaper printed and published in the State as said board shall deem to

be most generally circulated in said city, which notice shall be substantially as follows: To (stating the name of all owners and occupants of real estate in said assessment district so far as known) and to all other persons owning and occupying or otherwise interested in the following described real estate (giving the description of all real estate in said district), and to (giving the names of the street railroad companies to be assessed, if any), you are hereby notified that the sum of ..... dollars is the proportion of the amount of compensation awarded in consequence of the separation of grades of the street (or highway and railroad or railroads or any of these as the case may be) to be made at the intersection of (describing the intersecting street or highway and railroad or railroads by their names and in appropriate language) provisionally determined by the (giving name of the common council) to be assessed upon the above described real estate which has been provisionally constituted an assessment district therefor (upon said street railroad companies, naming them, or upon both said companies and said real estate, as the case may be). You will be given opportunity at the meeting of (giving name of said common council) to be held on ..... to show cause, if any there be, why any of the above described real estate should not be included in said assessment district, or (why said companies should not be assessed, or both, as the case may be), and why the amount to be assessed should not be fixed at the sum above stated.

Signed—(name of presiding officer of said common council).

SEC. 22. It shall be the duty of the clerk of the court in which said issue shall have been tried, to send a certificate to the county treasurer or city treasurer of the city or county wherein said proceedings were instituted, as the case may be, of the total expenses to be borne by said municipality in and about the separation of said grades as aforesaid, and the amount of which sums so reported as aforesaid, shall be levied, assessed and collected at the same time, and in the same manner, as general personal taxes are or may be collected, and shall, when collected by the proper collecting officers, be paid over to the treasurer of the city, county or township by which said proceedings were instituted, as the case may be, by whom it shall be placed to the credit of the fund created for the payment of the compensation on account of the changes of grade provided for. That it shall not be obligatory upon said municipality's authorities, or any of them, to pay said sum heretofore mentioned, out of the general fund, but the sum may be assessed upon the district benefited by said improvement and separation of grades in the same manner and form, and by the same authority as is established by law governing the said municipality for the determining of districts benefited by public improvement.

SEC. 23. The assessment roll containing said assessments on a city district, when ratified and confirmed by the common council, shall be prima facie evidence of the regularity and legality of all proceedings prior thereto and up to and including said confirmation, and all assessments therein contained shall be and continue a lien on the premises against which the same are assessed, until payment thereof. Such part of the compensation apportioned as above provided, to any city for payment as is not raised in the manner hereinbefore provided, and all that part of the compensation which is apportioned, as above provided, to

any county or township, shall be assessed, levied and collected on all taxable property of said city, county or township, as the case may be, in the same manner as general taxes are assessed and collected.

SEC. 24. The making of said separation of grades, whether in any railroad or in any street or highway, and of all other changes necessary to carry out the plan set forth in the resolution or certificate provided for by section three, or in the report provided for in section nine, shall not be postponed or delayed on account of the non-payment of any of the sums so awarded as compensation, nor shall the payment of any of the sums so awarded as compensation be a condition precedent to the making of any said changes to carry out the said plan.

SEC. 25. All changes of grades in any railroad or railroads, and all changes in said railroad or railroads consequent on said separation of grades, shall be made and carried out by the municipality made a party to said proceedings. When, according to said plan of separation of grades, the street or highway will cross the railroad by an overhead bridge, the framework of that part of said bridge within the side lines of the right of way and all abutments and supports sustaining that part of said bridge, shall be built, maintained and kept in repair by the railroad company, or, where such bridge crosses the right of way of more than one railroad company, by said companies. When, according to said plan of separation of grades, the street or highway will pass under a railroad or railroads, the railroad bridge, its abutments and the sustaining walls along the highway within the side lines of its own right of way shall be built, maintained and kept in repair by each railroad company. The surface and approaches of such bridge over which the street or highway passes, and such public way under such railroad or railroads, and the approaches thereto, shall be constructed, maintained and kept in repair by the township, county or city within which the same are situate, or, in the case of line crossings, by the joint action and under the joint supervision of the representative board or officer of the county or township, and of the persons or bodies in whom, by the charter of the city, the power to contract for and supervise the pavements of streets is vested, as the case may be. The expense of all work to be done by any railroad shall be paid by said railroad, or in case work is to be done by two or more railroads jointly, the expense shall be shared equally among them. The expense of all work to be done by any city, county or township, shall be paid by such city, county or township, or in case work is to be done by a city and county or counties, township or townships, jointly, the expense shall be shared equally among them. Such expense imposed on any city, county or township shall be provided for by taxation in like manner as its other expenses are provided for.

SEC. 26. Said order of confirmation shall, after reciting the substance of the verdict, and declaring the same confirmed, provide that the several amounts therein assessed against the railroad company or companies, and the several bodies politic and corporate, who are parties to the proceedings, shall be paid by them respectively within one year from the date of final confirmation, and that the change or changes of grade found to be necessary by said verdict, shall be made by the parties on whom the duty of making them respectively is imposed, within such reasonable time as the court shall in said order determine, not exceeding

one year from the date of said order. Such judgment shall have the force and effect of a decree in chancery and may be enforced by the court making the same, in any manner provided for the enforcement of chancery decrees.

SEC. 27. The officers, jurors and witnesses in any proceedings under this act shall be entitled to receive from the city, county or township instituting the proceedings, the same fees and compensation as are provided by law for similar services in an ordinary action at law in the circuit courts of the State.

SEC. 28. All the expenses and costs of proceedings under this act incurred by any municipality, county or township instituting the same, shall be paid out of the general fund, highway fund, or the fund provided for such purposes, as the case may be. It shall be lawful for the judge in any case to order the payment, by the city, county or township instituting the proceedings, to any respondent, of such reasonable attorney fee as he may deem just, not exceeding twenty-five dollars, which may be taxed with the other costs.

SEC. 29. It shall not be necessary, in any proceedings under this act, to give evidence in making out the prima facie case, of the party instituting the proceedings, of the ownership of interest of any of the respondents in any of the lands described in said petition as damaged or affected by said changes of grades, but the averments of said petition as to such matters shall, unless evidence is put in by the respondents contradictory thereof, be taken as true.

SEC. 30. In the city of Detroit, the city counselor or other officer who may be the head of the legal department of said city, shall perform the duties required by this act to be performed by the city attorney, and wherever the term city attorney shall be used herein, it shall as to and in said city be deemed to mean the city counselor or other head of the legal department.

#### CONCERNING STATE SUPERVISION OF ELECTRIC RAILWAYS.

By different enactments of the State legislature, limited control of certain matters connected with the supervisory control of street railway companies has been given to this department. It now has definite power to define the manner and form of crossings made by street railways over and through the tracks of steam railroads. It has the power to regulate the manner and form in which the wires of a street railway company shall be constructed over the right of way and tracks of a steam railroad company. Both of the powers conferred by the legislation above mentioned, have been executed by this department with reasonable activity as a portion of its well-defined duties. Under the first power, the department has caused safety appliances in the way of derailing devices to be placed at many dangerous points in the State, and is completing its labor of investigating all crossings of steam railroads by electric railways, with a view to having safety devices installed at all such crossings. Under the second power above mentioned, all trolley and other wires of street railway companies at the point of crossing steam railroads, are now constructed under specifications furnished by this department, and are being complied with in a substantial manner. Constant



surveillance by frequent inspections is kept over this branch of the department's duties, and no accidents during the past year have occurred from defective wires at these points. No objection has been met with on the part of the street railway companies subject to our jurisdiction to this extent, all orders heretofore made having been promptly obeyed.

#### ADDITIONAL LEGISLATION.

The last legislature, through provisions of act No. 102 of the public acts of 1897, sought to give this department supervisory control of corporations organized and operated under what is known as the "General Street Railway Act." The act seems to be adequate for that purpose under the provisions for the control of street railways doing suburban express business, and no others. The difficulties presented by this enactment are three fold: First, The act is uncertain as to the jurisdiction sought to be conferred by it, by its terms being doubtful as to whether the department has any jurisdiction over roads carrying freight and passengers, but not doing suburban express business in the technical sense of that term; Second, All corporations doing an express, freight and suburban passenger business, are not organized and doing business under the provisions of the law amended by said act No. 102, as some are organized under what is known as the "Train Railway Law," thus limiting the jurisdiction of the department to a few of such street railways as are organized and doing business under the street railway law above referred to; Third, Under the organic law of this department, provision has been made for the conduct thereof as to the matter of expense with a view to the supervision and control of steam railroads only; and therefore, no funds have been provided for the full and complete supervisory control of street railways, even if that control was absolute and beyond the question of doubt to the extent specified.

In connection with the last proposition, it goes without argument that the subject of electricity and its use in the transportation business is a specialty, requiring expert knowledge for a safe and proper regulation thereof; and the department could not safely and properly interfere with the management and supervisory control of such properties without the aid of competent assistants versed in the business. The expense in which this would involve the department would not be great, as in all other respects except so far as the use of electricity is concerned, the business of these companies is kindred with that of steam railroads, and the rules and regulations adopted under the supervisory control of the one, would apply in the majority of cases in the supervisory control of the other.

#### NECESSITY FOR THE EXERCISE OF POLICE POWER OVER ELECTRIC RAILWAYS.

The police powers of the State over electric railways are, of course, similar to its powers over all quasi public corporations, but in the case of these corporations have not been exercised except to the limited extent hereinbefore mentioned. There has been an indifferent attempt

in some cities, by ordinance, or otherwise, to regulate them; but the power has been exercised indifferently, generally being reserved for the board of aldermen granting the franchises, without the employment of experts or others persons whose immediate business it has been to make anything like regular investigations or inspections. Probably on account of the expense which would be attached thereto and made burdensome to all municipalities except one or two of the larger ones in the State. Even though the municipality exercises the power, it would still be objectionable, on account of a lack of uniformity of rules and regulations which would obtain in different parts of the State, and upon systems extending beyond the boundaries of the city limits, where the power, if exercised, would be by a different municipality and different authority.

The necessity for State supervision, by which these corporations would be brought under uniform rules established by a competent department, is easily established by a record of accidents and catastrophies occurring upon some of the interurban roads of the State during the current year, a descriptive list of which is herewith given; the cause of the accident being apparent from the situation existing at the point of accident, and the manner of its occurrence.

On July 7, 1897, a car on the Inter Urban Railway, in operation between Bay City and Saginaw, plunged into the Saginaw river while the drawbridge across the river was open. The result of the accident was the death of eight persons and injuries resulting to others. Safety appliances at the bridge would have prevented the accident, authority to order which was not then vested in this department.

On August 18, a car operated upon the Bay Cities Consolidated Railway collided with a Grand Trunk switching train on Center avenue in West Bay City, entirely demolishing the street car and injuring the motorman; other injuries were only prevented by the absence of persons that could be injured.

On October 29, a car on the Inter Urban Railway collided with a Flint & Pere Marquette switching train at Brown's spur near Mershon, during a heavy fog. No injuries resulted from the collision.

On November 29, a car on the Inter Urban Railway ran through and over the safety devices ordered by this department on the tracks of the Michigan Central Railroad crossing at Zilwaukee a distance of 70 feet after it lost its electric current, obstructing the track on the steam railroad and Inter Urban road at that point for twelve hours.

On December 4, two cars on the Oakland Railway, operating between Detroit and Pontiac, coming from opposite directions, at nearly if not quite full speed, collided at Birmingham, instantly killing three persons, fatally injuring two, and injuring a large number of others. The cause of this accident is now under investigation by this department, but will probably be completed too late for the present report.

In view of the above accidents and of the investigations made by this department at other points in the State where similar or other accidents are likely to occur, I desire to make the following recommendations as to the authority to be given this department, if deemed expedient, through the force of the general law applying to street railways generally without reference to the act under which they are incorporated:

(a) The department should have authority to regulate the speed of cars, limiting those to low rate of speed that do not have suitable weight and are not properly constructed for that purpose;

(b) The department should be authorized to insist upon the use of standard motors and cars, with a view to obtaining the greatest safety for the traveling public;

(c) It should have the power to require pilots or fenders, and sufficient air, power or track breaks where the situation requires them;

(d) On extensive systems the department should have the power to regulate the manner of operating trains upon single tracks, by requiring a system of train dispatching or other safety regulation;

(e) It should advise and consult with the companies with reference to the amount of training required of motormen and conductors for the safe management of this class of transportation;

(f) It should have the power to require safety appliances at crossings of other street railways, as well as railroads.

These are the principal duties which should devolve upon the department in any new enactment by the legislature upon the subject, to which others may be added, if the law is made general in its provisions.

This class of rapid transit provided by these companies has been and will continue to be of vast benefit to the traveling public. And it is not considered by this department that it is desirable to limit the speed of trains upon these lines to the least extent, but rather encourage an increase thereof, having in view, however, the safety of the traveling public.

In closing this subject, permit me to suggest that owing to the present financial condition of this class of companies, the State would be much aided in a speedy submission to its orders, if these companies were limited in the amount of bonded indebtedness which they might place upon their property, thereby increasing their fixed charges and lessening the funds necessary for the proper maintenance of their properties.

#### INTERCHANGEABLE MILEAGE BOOKS.

During the present year the railroads constituting the voluntary association, known as the Central Passenger Association, has issued a thousand-mile ticket upon the following conditions, among others:

1. The original cost of the ticket to be \$30.
2. The book itself not good for transportation, but only for the purpose of obtaining transportation; evidenced by trip tickets to be issued upon the presentation of the book for redemption.
3. Transportation for a continuous passage over more than one line of railroad cannot be obtained upon it, nor can baggage be checked beyond the point of the line issuing trip ticket.
4. After the company has redeemed the book by issuing trip tickets equal to the book's mileage, the holder receives a rebate of ten dollars.

The book became unpopular from the date of its issue, the objectionable features being the delay at stations in obtaining the trip ticket, the inconvenience of obtaining a new trip ticket on a continuous journey

over more than one system, and, as well, the inconvenience of rechecking baggage on the same trip.

From ex parte information received at this department it is claimed that this mileage book was issued as the result of negotiations with certain members of the commercial travelers' organization of the State. Both the railroads and the men whom the ticket was designed to please are disappointed, and active measures are now being taken to bring about changes in its form and its use.

In connection with this subject, I desire to call your attention to the 9th subdivision of section 3322 of Howell's Annotated Statutes of the State of Michigan, the portion of the section bearing on the subject being as follows: "One thousand mile tickets shall be kept for sale at the principal ticket offices of all railroad companies in this State, or carrying on business partly within and without the limits of this State at a price not exceeding \$20 in the lower peninsula and \$25 in the upper peninsula. Such one thousand mile tickets may be made non-transferable and, whenever required by the purchaser, they shall be issued in the names of the purchaser, his wife and children, designating name of each on such ticket, etc."

It is apparent that the mileage book above named is issued in violation of the above statute, the validity of which has just been established by a decision of the Supreme Court of the State of Michigan. While a majority of the roads are issuing the above ticket as well as the one adopted by the Central Passenger Association, some of them are violating the provisions of the law and for this violation no reasonable excuse is offered. A condition exists therefore with reference to this matter unparalleled in the history of the State. The companies exact from the State, and justly so, the service of the constabulary thereof in the protection of their property, an obedience to the requirements of any statute passed for their benefit, as well as an obedience to rules and regulations adopted by themselves. With a boldness rarely heard of outside of criminal circles some of them are violating this statute without apology or excuse. I therefore recommend that in the absence of a penalty in the statute itself, the matter be referred to the Attorney General, and in view of the enormity of the offense committed, that proceedings be taken for the annulment of the charters of such companies as persist in the violation of the law.

The names of the companies and the extent of the violations by them are now being obtained by this department and will be submitted to you in due time. While the remedy suggested may, at first sight, appear to you as too radical, especially as it may disturb to an extent the value of securities issued by the offending company, yet upon reflection I think you will conclude with this department that the remedy proposed is not more radical than the violation of the law is flagrant.

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# REPORTS AND RECOMMENDATIONS

AFFECTING PHYSICAL CONDITION OF ROADS

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## PHYSICAL CONDITION OF MICHIGAN RAILROADS.

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I herewith submit a report of the physical and mechanical status of the railroads in Michigan, as per record of special and regular inspections prior to and including October 31, 1897.

### PERMANENT WAY.

Nearly all the railroad companies continue to purchase heavier steel rails. The "rail section" has been much improved, and the usual weight per yard of rails used in renewal is from 67 to 80 pounds.

In laying new rails the question of expansion and contraction has been the subject of attention and experiment, allowances being made with special reference to the nature of the soil, whether continually filled with water or free from moisture, whether line is shaded or subjected to the hot sun, or the nature of the subsoil as to solidity.

Many companies now consider it important to note the variations in different sections of road in making adjustment at rail joints, rather than the usual custom of allowance for highest and lowest temperatures only.

Some of the larger systems are utilizing worn steel by sawing off the ends of rails, matching it with regard to length and previous wear and laying it with trussed or supported joints.

Worn rail thus treated makes very good track, several portions inspected that have been in service two years showing very satisfactory results.

### TIES.

This very important item is receiving close attention on the part of all companies. Some of the large systems in the southern portion of the State use ties of white oak exclusively, while the majority of roads use cedar and hemlock on tangents with oak in curves. Cedar is rapidly coming into favor as the best and most economical timber for ties that is available in this State, especially on the lighter traffic lines, and when used with tie plates is considered equal to oak in durability and safety for heavy traffic roads. The condition of the ties on the various roads is very satisfactory as compared with previous years.

**BALLAST.**

The amount of ballast provided and put in track on most of the roads has been comparatively small and insufficient during the past season. This has been on account of retrenchment in expense of operation chiefly, though it is generally conceded that it is false economy. The importance of good ballast, upholding ties from clay or subsoil and giving easy drainage cannot be overestimated. Gravel and cinders constitute the material for ballast in the order named.

**SURFACE AND ALIGNMENT OF TRACK.**

It is noted that aside from the main traffic lines of the large systems the general condition of track surface and alignment is not as good as on former inspections. This is due to lack of ballast and to insufficiency of track force, many cases being noted where two or three men, including foreman, have care of six miles of track besides contiguous sidings. Safety to the traveling public largely depends upon the standard of track and maintenance of same, and it is a positive conclusion that a road allowed to run down in track details is an expensive one to operate. Retrenchment in other branches of service would be better. The various duties expected of the limited track force on some of the roads is surprising and almost incredible. On one occasion it was noted that upon a section of six miles with two men composing the gang, one was flagging in a dangerous locality, while the other was assisting in replacing a broken rail. It is perhaps needless to say that the department has directed its efforts toward a better track service than above mentioned.

A great improvement is noted in the elevation and alignment of curves. The practice of adjusting curves by old rules upon which trackmasters differed materially, has given way to scientific formula, relining and spiraling the curves by instrument and adjusting the elevation to the highest speed required.

It is held that the safety of passengers is most important and curves should at all times be adjusted for the maximum speed and not for the average speed required for mixed traffic.

**SWITCHES AND FROGS.**

Stub switches are being rapidly replaced by split point switches on nearly all roads in the State. The split point switch requires competent care and inspection and gives good satisfaction. Rigid switch stands are taking precedence over the automatic or spring type for main track switches, it being conceded by practical experience that they are more positive and safer. Some of the roads use reinforced points and find them very satisfactory, the number of parts being lessened, greater strength obtained and less trouble experienced in maintenance.



The item of blocking frogs, guard rails and switches is very important. Nearly all the railroad companies pay particular attention to filling all angles with blocking made of wood. Wooden blocking is troublesome to keep in place, decays quickly, and when not properly kept in position there is no less liability to accident than without any blocking. Some states have condemned blocking made of wood, prohibited its use and stipulated the use of metal for the purpose. Accidents to employes by being caught in rail angles have been very few during the period under report.

#### BRIDGES.

The bridge structures in the State are generally efficient. Very few renewals of important bridges have been made during the year, the improvements being in way of reducing or entirely filling the bridges with earth embankment or in temporary repair. A large number of inspections of bridges and track openings have been made, in several cases specific orders issued for renewal or repair, and on all bridges where the factor of safety is in doubt trains are run at reduced rates of speed, and the structures are under constant surveillance until repairs or renewals are completed.

The item of guard rails on bridge floors to guide the wheels of derailed trains is not receiving the attention desired for safety by many roads in the State. Many companies do not consider this precaution necessary, while others consider it of great importance. I am convinced that in the interest of public safety guard rails should be provided on every bridge opening over 12 feet in length. They should be constructed of steel not less than 60 pounds to yard bolted, with angle bars, firmly spiked in position with ends on approaches to bridge depressed so as to prevent brake beams or broken parts of cars or engines from catching ends of rails and thereby increasing the danger.

#### INTERLOCKING SWITCHES AND SIGNALS.

The general condition of the interlocking switch and signal systems at railroad crossings and junctions has been much improved during the past year. There are 101 of these appliances that have been ordered by the Board of Railroad Crossings, Commissioner of Railroads, or put in by mutual consent of the companies in interest. Of this number all are in serviceable condition except four; three are in process of repair or renewal, and orders for the renewal of one are withheld pending negotiations for changes in crossing.

The details of operation of these appliances, as stipulated in official orders of approval, are generally complied with, except that the limit of speed specified is generally exceeded, and in some instances speed of fast trains is not decreased while passing interlocked crossings. I urge that distant signals at interlocked crossings on main traffic routes where fast time is required should be electrically locked, so as to prevent any interference with the machine until the entire train is over the crossing.

The expense of electrically locked levers operating derailleurs or signals, is inconsiderable as compared with the factor of safety obtained when large and heavy passenger trains are run over interlocked crossings at a high rate of speed. It is very important that there should be a reform in the observance of rules of all railroad companies in this matter, which are made in compliance with orders of approval of these appliances, by this department, on all high speed routes, if electric locks are not provided as outlined above.

The Board of Railroad Crossings have ordered 16 switch and signal systems during 1897 at crossings of new lines, which are not included in the number previously given. One of these has been finished and approved, and the others are in process of construction. Four are full interlocking systems at crossings of main lines, twelve are half-interlockers at crossings of secondary tracks, spurs or sidings by main traffic lines.

It has been recommended to the board by this department that all new crossings of secondary or switching tracks by main lines should be provided with half-interlocking machines to be operated by trainmen on switching tracks. The importance of this action lies in the fact that in foggy or stormy weather signals on gates at crossings are inadequate, especially when high speed is required on the main lines. This recommendation was indorsed by the Crossing Board and all orders approving crossings issued in compliance therewith. During the year there have been no derailments at interlocked crossings involving casualties or excessive damages.

#### RAILROAD AND STREET RAILWAY CROSSINGS.

The subject of adequate protection against accident from collision at this class of grade crossings has received considerable attention; all crossings have been inspected by this department, and mechanical devices ordered at several of the more dangerous ones, while at others, investigations are pending regarding the necessities and nature of appliances to be provided.

There are two methods of mechanical protection that have been adopted for use at this class of crossings. One is a half-interlocking machine with derailleurs and signals on street railway tracks, signals on steam railroads properly placed according to varying conditions, which are manipulated by levers properly interlocked so that conflicting signals cannot be given and operated by a joint employé from a tower at crossing who may also operate gates for street protection.

The other method consists of derailleurs placed in electric railway tracks which are connected with levers placed near crossing at best point of vision of approaching trains on steam tracks and to be operated by conductor of electric car after it has been stopped at derailing switch.

The former method is necessary and gives good satisfaction at crossings where there are many tracks, where the traffic is heavy and where movements over the crossing are very frequent.

The latter method has proved satisfactory on single and light traffic crossings. Signals are sometimes necessary when this form of appliance

is used, to be placed on steam tracks and interlocked with derailleurs, if view of approaching trains is obscured.

At the inspections of this class of crossings made on July 22, 23 and 24, 1897, 14 crossings of this character in this State were found on which some form of mechanical protection was recommended. These recommendations were made upon consideration of three points, viz.: 1st, the amount of traffic over crossings on each line; 2nd, the customary speed of trains on steam roads; 3d, the obstruction to view of approaching steam trains.

In considering the conditions named, protection was recommended only at crossings where it was absolutely necessary, and where the protection afforded to the companies operating electric lines as well as the measure of safety assured to the traveling public, would be entirely consistent with the expense incurred in the installation of the necessary appliances.

#### PROTECTION AT DRAWBRIDGES.

The investigation of the disaster on the Inter Urban Railway near South Bay City on July 7, 1897, caused by an electric car plunging through an open draw into Saginaw river, resulting in the death of eight persons and many serious injuries, was made by me through the mechanical engineer of the department on July 8. The report thereof leads to a positive conclusion that adequate mechanical protection at all points where railways cross drawbridges is an imperative necessity. A scheme to properly protect trains or cars against accident at these points is entirely feasible from a mechanical standpoint, and will be economical to the railway companies in operation, and will protect their property interests, as well as assure safety to the traveling public. The appliances provided, properly designed, and approved by this department would dispense with the necessity of trains or cars being brought to a full stop before crossing drawbridges; allowing them to proceed under restricted speed when route and signals are properly set for them. I submit that legislation providing authority to dictate said devices at all drawbridges in this State is an urgent necessity.

#### EQUIPMENT.

The general status of motive power, passenger coaches and freight cars, has been much improved during the past year.

Larger and heavier locomotives, equipped with all modern safety appliances, have been purchased or built by a number of companies operating railroads in this State.

The requirements of law relative to standard height of draw-bars from the rail and the application of grip-irons to freight cars have been complied with. Considerable progress has been made in the equipment of freight cars with automatic couplers and air brakes, as evidenced by reports to this department, though none of the companies have fully complied with the national law that all such cars should be so equipped before January 1, 1898.

I herewith give a table showing number of freight cars owned by each company; number equipped with automatic couplers and air brakes, also number equipped with couplers during the present year to and including October 1st, 1897:

Railroads.	Freight cars owned, number.	Freight cars equipped with automatic couplers, number.	Percentage of cars equipped with automatic couplers.	Freight cars equipped with air brakes, number.	Percentage of freight cars equipped with air brakes.	Freight cars equipped with air brakes during period under report.
Ann Arbor.....	1,805	1,186	65.70	726	40.22	-----
Boysie City & Southeastern.....	38	-----	-----	-----	-----	-----
Chicago & Grand Trunk System.....	1,290	350	27.13	309	20.81	282
Chicago, Kalamazoo & Saginaw.....	12	-----	-----	2	-----	-----
Chicago, Milwaukee & St. Paul.....	27,523	19,165	69.63	13,406	48.71	4,689
Chicago & Northwestern.....	35,017	30,523	87.	22,453	64.	5,223
Chicago & West Michigan.....	2,668	1,928	72.	351	13.	450
Cincinnati Jackson & Mackinaw.....	1,042	355	34.	-----	-----	110
Detroit, Grand Rapids & Western System.....	1,218	880	71.	13	1.	450
Detroit & Mackinac.....	483	207	43.	160	33.	29
Duluth, South Shore & Atlantic.....	3,073	1,061	34.	627	20.	-----
Flint & Pere Marquette.....	3,395	1,141	34.	6	-----	318
Grand Rapids & Indiana System.....	3,130	2,160	69.	787	25.	389
Hancock & Calumet.....	277	100	36.	-----	-----	-----
Lake Shore & Michigan Southern System.....	18,841	18,720	99.	13,513	71.	2,206
Lowell & Hastings.....	5	-----	-----	-----	-----	-----
Manistique.....	3	1	33.	-----	-----	-----
Michigan Central System.....	10,848	7,963	73.	3,651	38.	1,846
Mineral Range.....	183	-----	-----	-----	-----	-----
Minneapolis, St. Paul & Sault Ste. Marie.....	6,057	2,069	34.	1,325	22.	1,143
Munising.....	261	200	76.	200	76.	-----
Milwaukee, Benton Harbor & Columbus.....	22	7	32.	7	32.	-----
Wisconsin & Michigan.....	578	578	100.	10	2.	-----
Wabash.....	496	190	38.	88	19.	30
Total.....	119,296	88,804	74.	57,636	48.	17,146

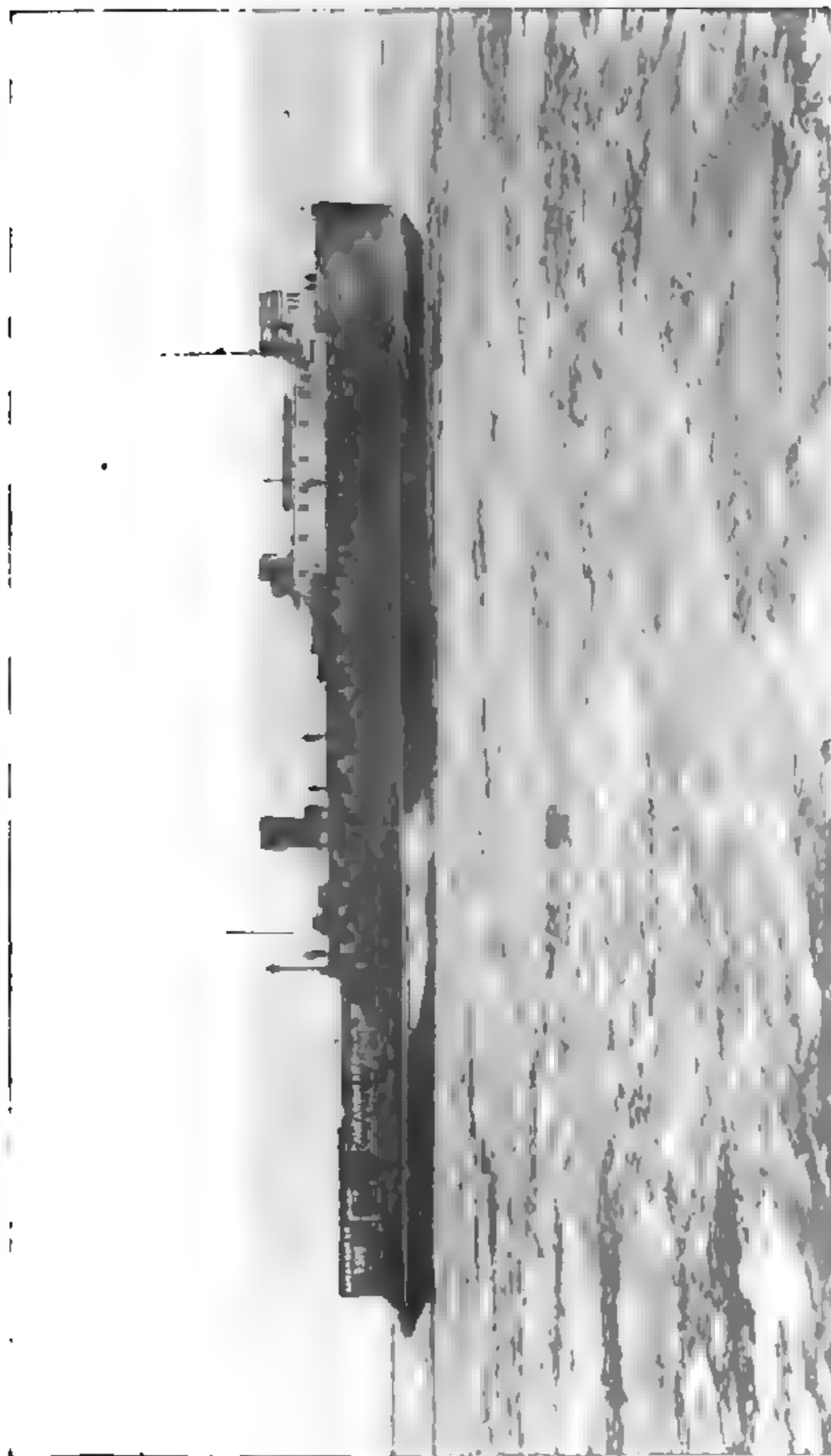
#### HIGHWAY CROSSING ALARM BELLS.

This method of street or highway crossing protection is coming into extensive use in this State.

There are 60 crossings protected by this system, 43 by automatic alarms and 17 that are controlled manually by signalmen stationed at adjacent crossings or interlockings. These alarm bells are actuated or controlled by electric or pneumatic power, the former almost exclusively, either as the power for operating the alarm or controlling the automatic features of the appliances. The effect and practical utility of this class of signals would be much greater if more competent care and supervision were given them. The attached statement of failures is not, in my opinion, due so much to defects in the different types of alarm bells as to neglect in providing competent care and maintenance.

During the fiscal year ending June 30, 1897, the automatic alarms were out of service from breakage or failure of mechanism 3,795 hours,





CAR FERRY "ANN ARBOR No. 1"

or a percentage of 88.25 hours at each crossing during that period. These figures are taken from daily reports of inspection submitted to this department, and it is noted that there were seven crossings that were thus protected where the service was continuous.

I am of the opinion that with proper construction and care in maintenance this method of protection is adequate at a certain class of crossings.

#### SIGNS AND WHISTLING POSTS.

A large number of highway crossing signs were found to be weather beaten and the inscriptions thereon hardly discernible. In every case it was promised that the old crossing signs should be renewed at once. On several roads highway crossing signs were noticed with letters smaller than the standard required by law in this State. All renewals will be made with letters 12 inches in height.

At the request of several locomotive engineers the matter of whistling posts to designate point at which whistle should be blown for highway crossings was taken up for consideration. The following roads were noted as without such posts: Michigan Central Railroad, Flint & Pere Marquette Railroad, Detroit & Mackinac Railway, Saginaw, Tuscola & Huron Railroad. The Mechanical Engineer made a report thereon and submitted the following: "On a number of railroads in this State whistling posts have not been provided and placed to indicate distance from highway crossings at which whistle must be blown as required by law.

"The consideration of the matter has been brought to my attention by engineers who, while they do not make specific complaint, claim that whistling posts properly placed would materially help them in the strict observance of the law.

"It is held that in foggy or heavy weather, either rain or snow, when necessity for whistle signals is greatest, and the absence of landmarks owing to similarity in the surface of surrounding country, it is almost impossible to blow whistle at proper distance from crossing; instances being common when the whistle would be blown too far away and repeated, or when the wing fences would come in view, which would not be over 100 feet from crossing.

"Further, that whistling posts act as a prompter when the attention of the engineer is momentarily attracted by other duties, and that the common view of posts set for this purpose stimulates positive action in this important duty.

"From practical experience I consider these arguments reasonable and worth serious consideration.

"I therefore recommend that railroad companies that have not placed whistling posts to indicate where signals should be blown, should be required to provide them.

"Owing to the increased speed of trains since the law was passed; I suggest sixty rods as a proper distance to place the posts from the crossing."

Upon the presentation of this report to the railroad companies above named, it was mutually agreed that the whistling posts should be provided at once and placed as recommended without an official order from this department.

## BLOCK SIGNALING.

The practice of blocking trains by a system of signals which permits only one train in certain limits at the same time is becoming general on some of the roads in this State.

On a number of single track lines a permissive system of blocking is used, allowing trains to follow after a preceding train has passed into a block a certain time limit. On others a positive block of trains is made by operators using station or other fixed signals manually controlled and operated.

## AUTOMATIC BLOCK SIGNALING.

Realizing the importance of automatic block signaling on heavy traffic lines, especially on double tracks, I herewith submit a practical description of the different types, with approximate cost of installation and maintenance.

The automatic block signal system, which has been developed within the last few years, is now recognized as a system of exceptional merit for the safe and rapid handling of trains, with no cost for operation, and a reasonable cost for maintenance. With this system the signals are actuated by trains and controlled and operated by electric, pneumatic, or other agency. Pneumatic power is used only for operating the semaphore type of signal, but electricity is extensively used, both as the power for operating the signals and as the controlling power in connection with the automatic features of the system. This system is used extensively on double track by several of the leading roads of this country, over sixty miles of double track blocking being in service on the M. C. R. R. in this State. On this road the average length of the blocks is two miles, the blocks being shortened at terminal points and yards. In general the lengths of the blocks are determined by the volume of traffic and local conditions, such as yards, grades, curves, etc.

In order to provide against a train overrunning a block signal and colliding with a train which might be standing a short distance within the block, either caution signals are placed from 2,000 to 2,500 feet in advance of their respective block signals and indicate their position, or the clearance points of the signals are so placed that a block signal will not clear until the rear end of a train has passed 2,000 or 2,500 feet beyond the next signal.

There are practically only two types of automatic signals as regards the track controlling devices, which devices, with their controlling circuits, constitute the automatic feature of this system. These types are respectively the track instrument, and the track circuit types. Electricity is almost universally employed as the controlling power for each type on account of its reliability and its adaptability to the purposes required.

In the former system, instruments of suitable design are placed alongside of the track at the beginning and end of each block, a lever extending from the instrument to the outside rail of the track and so placed as to be depressed by the wheels of a passing train. The depressing of the lever of the instrument by a train at the entrance end of the block opens a spring in the track instrument, which breaks the circuit of





"PERE MARQUETTE" CROSSING LAKE MICHIGAN



the signal controlling relay, the latter in turn cutting off the power that holds the signal in the clear position and allows the signal to assume the danger position by gravity, in which position it will remain until the train passes over the clearing instrument placed at the outgoing end of the block. The operation of the latter instrument closes the controlling circuit and restores the power which clears the signal.

With the "permissive" system of blocking, which permits of a train passing a danger signal, after waiting a certain length of time, and entering a block at slow speed, when the block is already occupied by a preceding train, intermediate instruments, between the set and clear instruments, are used to prevent the first train clearing the signal upon passing out of the block and leaving the second train unprotected. The clearing instrument is so constructed as to hold the circuit of the signal controlling relay open until the rear end of the train has passed the instrument. When caution signals are not used, the clearing instrument, for a signal, is placed far enough within the block beyond the next signal so as to provide the same measure of safety as is provided by the caution signal.

#### TRACK CIRCUIT SYSTEM.

The essential feature of the track circuit system is the utilizing of the rails of the track as the medium for the flow of the current which operates the signal controlling relays. The track of the block is divided into two or more subdivisions, low voltage battery being placed at one end of each subdivision and a relay at the other end. The rails at the ends of the subdivisions are insulated from each other by means of wooden splice bars and the insertion of fibre and posts between rail ends. All of the rail joints between the ends of subdivisions are bonded so as to assure an uninterrupted flow of the current. It is necessary to divide the track of a block into at least two sections, in order that, where caution signals are used, the section between the caution signal and its block signal will control the former, or where the overlap system is employed, in lieu of the caution signal, the first section of a block, which is the overlap section, must control both the signal at the entrance to the block and the signal of the preceding block as well. In blocks  $1\frac{1}{2}$  miles long, or over, the track is divided into three or more sections, as the conditions require, in order that in wet weather there will not be so much loss of current as to prevent working the track relays.

Each one of the track relays of a block controls the operating power of the signal directly, or by means of auxiliary relays and circuits. The first pair of wheels of a train upon entering a block will set the signal to danger by means of opening the points of a track relay. The wheels and axles of a truck having practically no resistance to the flow of current, provide an easier path for the flow of the track battery current than does the track relay which has at least four ohms resistance, in consequence of which the current, instead of going through the track relay, returns to battery by means of the wheels and axle of the truck; the track relay being robbed of its current, allows the armature to drop, cuts off the signal operating power and the signal goes to danger.

In either the track instrument of the track circuit system the circuits are so arranged that any interruption of the flow of the current cuts off

the power which holds the signal in the clear position and allows same to go to danger by gravity.

All switches leading into, or in the main tracks, are so connected with the block system that the opening of a switch  $\frac{1}{4}$  inch or over, sets to danger the signal of the block in which such switch is located.

With the track circuit system, indicators are placed at all main track switches and are used to indicate or announce the approach of a train by the display of a red disc or the ringing of a bell. When a train closely approaches, or is inside of block in which a switch is located, a visible or audible indication is given of the approach of such train, which indication is a warning against the opening of a switch until the train has passed or a clear indication is shown. With this system, a car occupying any portion of the main track, or standing on the side track fouling the main track, or a broken rail in the main track, will hold the signal at danger. Should several trains occupy a block it would be impossible for the signal to clear until the last train had left the block. The same safeguards cannot be obtained with the track instrument system, a train breaking in two and leaving the rear portion in a block, the first portion upon passing out of the block will clear the signal and leave the rear end unprotected. A car fouling main track, and a broken rail in the main track have no control of the signal in the latter system. Both systems are about equally reliable as regards the unusual display of danger signals due to defects in the system. It therefore follows that the track circuit system, which offers the greatest degree of protection, with equally reliable operation, is preferable, and warranted the railroads in adopting it for all recent applications.

The cost per mile of the double track, for the installation of the track circuit system of automatic block signals is from \$1,000 to \$1,500, depending on the length of the blocks, number of switches, and the type of signal used.

The cost of maintenance which is affected by the same conditions as for installation, is from \$155 to \$165 per mile of double track.

Automatic signals are used very little on single track. The fact that it is not considered feasible to use the absolute system of blocking with automatic signals on account of the seriousness of the delays which would be caused when signals stand at danger through the failure of battery, etc., and the further fact that it has been deemed necessary to employ the absolute system to prevent "head on" collisions, has discouraged their use.

It is apparently practicable to use the permissive system of automatic block signals on single track for the safe operation of trains moving in the same direction, while at the same time some immunity can be secured from the danger of "head on" collisions. The dispatchers, being relieved of the duty of spacing trains which are going in the same direction, can more easily and safely handle meeting trains. Experience may teach that single track automatic signaling, operated under permissive rules, is as safe and expeditious a method of handling trains as the lock and block system of manually operated and controlled blocking, while being the cheaper system to operate and maintain.

The above information, given in technical language, is designed more particularly to aid such companies in Michigan as are intending to adopt





"PERE MARQUETTE" AT DOCK, LOADING

new and improved signal systems, and as well to those which may hereafter be required to adopt the same, there being one or more points in Michigan where the adoption of this system seems to be absolutely necessary to secure the public safety.

#### CAR FERRIES.

In addition to the activity in building new and additional lines of railroad within the State, a new field of transportation has rapidly been developing by means of car ferries used for the transportation of cars with their contents across the great lakes surrounding the State, and chiefly across Lake Michigan.

Three of the most important lines of the State are now seeking to increase their business and facilities through the transportation of products over their lines from and to the west and northwest, viz., the Ann Arbor Railroad, the Flint & Pere Marquette Railroad, and Detroit, Grand Rapids & Western Railway. What is known as the "Big 4 System" also has a car ferry in operation from Benton Harbor to Chicago, Milwaukee, and other lake ports.

Just what influence, by way of increased business, this project in railroading will have upon the earnings and conditions of the roads engaged therein, must, owing to imperfect data and to the business being a new venture, be left to subsequent reports. The corporations engaged therein are very hopeful of its future, and some of them, at least, claim that the successful operation of this class of business will, in the very near future, result in a change of the character of their roads from "merely local roads" to through trunk and freight line roads, and make them as profitable as any of the companies now doing a through freight and passenger business.

This method of transportation materially reduces the distance necessary to haul freight and passengers between distant points from and to the west and northwest, and by competition with all-rail routes will no doubt materially reduce freight charges on the products of the west and northwest, as well as on the products of the mines, mills and factories from the east and south to the west and northwest.

The experience of the companies that have car ferries, especially upon Lake Michigan during the last winter, has been that little or no hindrance has been experienced either from the ice formation or on account of the inclement weather. The steamers or boats used are of necessity very large and bulky, and are provided with ice crushers and other appliances for overcoming difficulties usually experienced in navigating the lakes during the winter.

The cuts, descriptions and specifications of the Pere Marquette, the largest car ferry on the lakes, operated by the F. & P. M. R. R. Company, which are given herewith, show the general idea of the car ferry business, with data as to general plan and construction.

#### THE CAR FERRY "PERE MARQUETTE."

The car ferry Pere Marquette was put into service on Lake Michigan between Ludington, Mich., and Manitowoc, Wis., on February 14th, 1897, and has since been making regular trips. Was built expressly for this route at F. W. Wheeler & Co.'s ship yards, West Bay City, Mich., for the Flint & Pere Marquette Railroad Company, and is a steel twin-

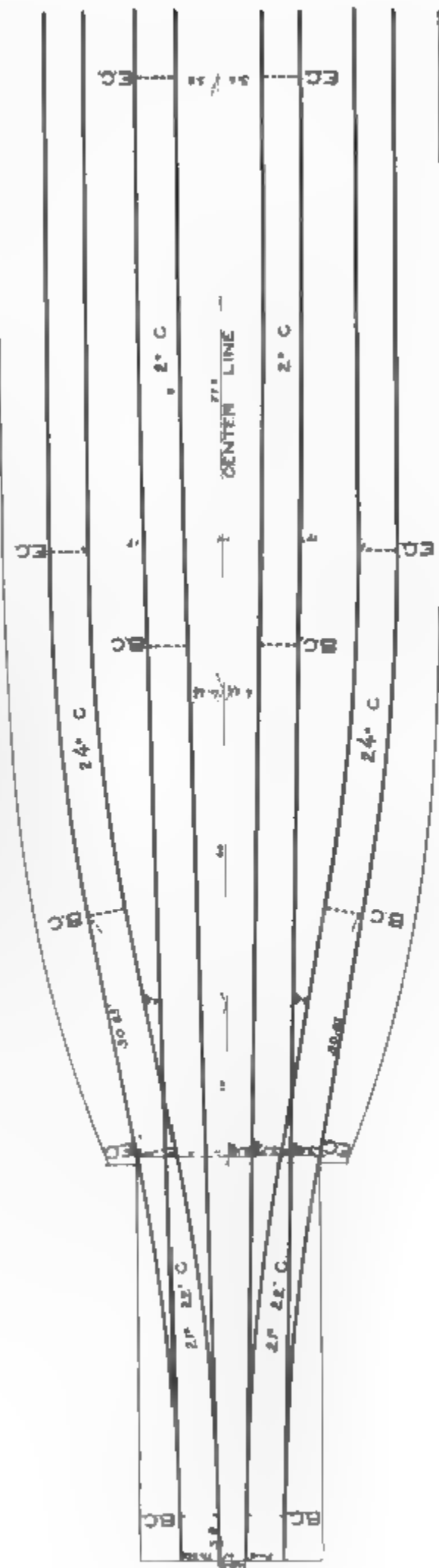
screw vessel of 350 feet in length overall, by 56 feet beam, with a moulded depth of 19 feet 6 inches to the main deck, which extends the full length of the vessel; above the spar deck are two substantial deck-houses for the accommodation of passengers and crew. Has four railroad tracks on the main deck to accommodate 30 standard freight cars. Especial consideration has been given to the question of strength in this vessel, so that it can with certainty be said that in the matter of weights and distribution of materials, she is the strongest steel vessel on the great lakes. The main frames are of steel channels 12 inches deep, backed up with keelsons and stringers from 4 to 6 feet apart, and at the load water line is a regular deck stringer with beams every 8 feet strongly bracketed above and below. The main sheerstrake is doubled, as is also the bow plating for a length of 60 feet; and aft, the hull is built out so as to enclose the propeller shafts and dispense with brackets or other extraneous fittings that might be liable to injury from ice. The entire construction, including the decks, is of mild steel, carefully inspected and tested to the highest requirements. The vessel is divided below the main deck into seven compartments by six watertight bulkheads, the extreme forward and aft compartments being further subdivided by a water-tight flat at the level of the water line, so that in the event of any bottom injury, the vessel would remain afloat with any one of the main compartments flooded. The propelling machinery consists of two sets of compound, vertical, direct-acting, jet condensing engines, each entirely independent of the other, having cylinders 27 inches and 56 inches diameter with a 36-inch stroke, capable of developing a maximum of 3,500 indicated horse-power, and calculated to propel the vessel at a speed of 15 miles per hour. The working part of the machinery, such as shafting and rods, have been made from 10 to 25 per cent heavier than ordinary marine practice, and the propellers, which are of cast steel of the sectional type, are also unusually heavy. Steam is supplied by four boilers, built by Wickes Brothers of Saginaw, Mich., of the single ended "Scotch" type, each 15 feet 3 inches diameter by 12 feet long, constructed for a working pressure of 130 pounds steam. In the matter of equipment, the best modern practice has been adopted, so as to insure this vessel being of the highest character in all particulars. This includes a combined hand and steam steering gear; "Providence" steam capstan windlass; stockless anchors housed in hawes pipes; four steam deck warping capstans; steam fire pumps and bilge pumps, and twelve life boats. Has a complete electric light installation, including search light. The model of the vessel has been designed to suit winter navigation, and care has been taken to insure that she shall be safe and seaworthy in every particular.

It is obvious that there is a growing necessity for a standard plan of tracks on boats and docks, height of same and size of slips, in the interest of interchange of traffic. With the possible magnitude of this method of transportation it will be found as essential to the interests of railroad companies and shippers to construct ferries and slip docks in a manner permitting interchange of business, as to have standard gauge of railroad track.

So much importance, in my opinion, attaches to this necessity that I recommend legislative action on the subject.



PLAN  
 TRACK-SYSTEM  
 F&P.M. CAR-FERRY "PERE MARQUETTE"  
MEASUREMENTS TAKEN TO GAUGE LINES





INTERRUPTION TO NAVIGATION AT THE PRINCIPAL PORTS IN  
WESTERN MICHIGAN USED OR TO BE USED BY CAR FERRIES.

As bearing upon the subject of car ferries I herewith submit information upon the condition of navigation during the winter months at the ports of Grand Haven, Frankfort, Muskegon and Ludington, furnished by the Honorable George A. Farr, Collector of Customs for the Western District of Michigan.

In reading these statistics it should be borne in mind that Ludington became a winter port January 1st, 1894; Frankfort and Muskegon February 18th, 1895, while Grand Haven has been a winter port for ten years and upwards.

Interruptions to navigation have occurred at the above mentioned ports, during the months of January, February and March, as follows:

GRAND HAVEN.

- 1888. February 4 to 13 and 16 to 20.
- 1889. February 19 to 26.
- 1890. No interruptions.
- 1891. No interruptions.
- 1892. No interruptions.
- 1893. February 7 to 14, 15 to 21, 22 to 27.
- 1894. February 20 to 25.
- 1895. No interruptions.
- 1896. February 17 to 25.
- 1897. No interruptions.

FRANKFORT.

- 1895. March 7 to 11, 21 to 24, 25 to 27.
- 1896. January 1 to 6, 18 to 21; February 9 to 12, 17 to 24; March 5 to 9, 23 to 27.
- 1897. No interruptions.

MUSKEGON.

- 1895. February 18 to 21, 22 to 28; March 2 to 5, 6 to 11.
- 1896. January 1 to 6; February 10 to 13, 17 to 22, 28 to March 4.
- 1897. January 15 to 18, 24 to 28; February 22 to 26, 26 to March 1; March 25 to 30.

LUDINGTON.

- 1894. February 4 to 7, 16 to 19.
- 1895. January 19 to 23, 28 to February 6; February 6 to 13.
- 1896. No interruptions.
- 1897. No interruptions.

## EXTRACTS FROM REPORTS OF ANNUAL INSPECTIONS REQUIRED BY LAW.

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Owing to the extent of the mileage of railroads in Michigan, the department has been hampered in making such a careful and detailed inspection of the railroads of the State as desired. While much benefit arises from an inspection by going over the roads in an observation car, yet the experience of the department in that line leads to the conclusion that facilities can now be obtained for a much better and more detailed and thorough inspection, especially so far as the same relates to culverts and bridges, and as well the general physical condition of the road and tracks. To accomplish this end the organic law of this department should be changed and the State purchase for its use a standard inspection car, to be operated by steam or other motive power. The railroad company whose properties are to be inspected should be required to give a right of way to the car over its tracks upon the request of the Commissioner of Railroads, and the same should be subjected to the train despatching service of the company; and the company should also furnish it with such attendants on the part of its employes as would make such operation upon its line safe and convenient. To make a complete inspection, this car should be manned by men competent to inspect the track and track structures, and as well by a man competent to inspect bridges and other structures.

I submit the above recommendations for such consideration as you may deem advisable to give them.

### DEPARTMENT ORDERS.

So far as practicable, without application, and in all cases where applications for hearing have been filed, this department has only made its decision after a full and complete hearing of all complaints, and in most cases after an inspection of the situation complained of.

Experience, as well as the evident justice of this course, has produced most satisfactory results in obtaining a ready compliance with the orders of the department on the part of the railroad, street railway, telegraph and telephone companies, all of whom are to a greater or less extent under the jurisdiction of this department. Such compliance has very much facilitated its work and has saved it much time which otherwise would be taken up with needless correspondence and perhaps

the spending of considerable time in the courts in enforcing the penalties of the statutes.

I am pleased to report that not to exceed seven orders of the department so far as it has information, remain uncomplished with, out of the number presented elsewhere in this report. Of these, three are against railroad companies and the balance against telephone and electric railway companies.

The penalties of the statute for non-compliance with these orders have not been enforced at the date of this report because the breach thereof has but just occurred. They will be taken up at once, and the right of the State to exercise its police power in each instance contested in the courts, if necessary.

#### ANN ARBOR RAILROAD.

A special inspection of this line, made early in July, showed fair general conditions.

Track and bridges good, except structure at Manistee river one mile north of Sherman, upon which necessary repairs were specified by this department and promptly made. Four bridges have been rebuilt, 408 feet of large iron pipe used in replacing two box culverts, in very high embankments, at Yuma and Sherman.

Amount of material used in filling, 70,000 cubic yards.

Four stations rebuilt, balance in serviceable condition. One hundred twelve thousand six hundred and fifty-five new ties have been used in renewal, and 250 tons of new steel, 70 pounds to the yard, has been laid.

This work has been done between January 1st and October 1st, 1897. Extensive improvements are in progress on terminal facilities at Frankfort; 3 miles of new track have been laid in yards at this point; a large warehouse and considerable new dockage provided.

The right of way fences along the line were found to be in bad shape, but a large amount has been built or repaired, and it is promised that the entire line shall be properly fenced at an early date.

Subsequent inspections have developed that this property has been generally improved during the year.

#### AU SABLE AND NORTHWESTERN RAILROAD.

This road is a narrow gauge, 74 miles in length, and does very little general traffic business, being used principally for transportation of logs and forest products.

One mixed train is provided each way daily for public traffic, and road bed and track is found in fairly good condition.

Train equipment for public service is provided with safety appliances required by law.

The attention of this company was called to the absence of blocking for frogs and switch angles, and immediate attention was given to the same.

Thirty-five thousand new ties have been used in the track during the year.

## GRAND TRUNK SYSTEM—WESTERN DIVISION.

This system comprises all lines operated by the Grand Trunk Railway west of St. Clair Tunnel, viz.: Chicago & Grand Trunk Railway, Port Huron to Chicago; D., G. H. & M. Ry., Detroit to Grand Haven; C. S. & M. R. R., West Bay City to Durand; T. S. & M. Ry., Ashley to Muskegon; Michigan Air Line Ry., Lenox to Jackson; and Chicago, Detroit & Canada Grand Trunk Junction Ry., Port Huron to Detroit, amounting to main line mileage in Michigan of 633.47 miles.

The C. & G. T. Ry. has the distinction of doing the heaviest business over a single track of any of the trunk lines in the State. The permanent way, track and equipment is in an excellent condition. All safety appliances required by law or used in modern practice are provided, and the road is managed by very competent officers.

The D., G. H. & M. Ry. is found in good, satisfactory condition. One of the oldest lines in the State, its reputation for good road-bed, equipment and service is maintained. New freight division terminal facilities with round house and yard are being constructed at Durand, which will also be used as eastern terminal of T. S. & M. division.

The T. S. & M. and Air Line divisions, on account of the light traffic carried, have not been so well maintained as the rest of the system, though considerable attention has been given to repairs of bridges and track on these divisions, and they are not in a dangerous condition; considerable renewal and repair will be required during the coming year.

The interlocking and signaling systems on entire line are efficiently maintained.

The station facilities at some of the junction points where passenger transfer business is heavy, have been found to be inadequate, notably at Durand. Plans are being matured for the construction of a new passenger depot at this and other points where necessities require.

Frogs, guard rails and switches were found blocked as required by law.

## CHICAGO, KALAMAZOO AND SAGINAW.

This road extends from Kalamazoo to Woodbury, a distance of 45 miles, and is in a good and serviceable condition.

The track is in good shape, a large number of ties having been used for renewal during the past year.

The train equipment and rolling stock are in fair condition, although no automatic couplers are furnished on freight cars.

Three hundred feet of culverts and bridges have been filled with earth during the present year.

No whistling posts for crossings are provided on this line.

## CHICAGO, MILWAUKEE AND ST. PAUL RAILROAD.

Inspected September 23d, 1897.

The line from Champion to Iron Mountain is in good condition, the steel and maintenance of track being excellent and entirely adequate for the fast passenger service afforded.

The line from Channing to Ontonagon is not in good condition, surface and alignment being not as good as noted in former reports of inspection.

It was represented by Superintendent Minturn that this was owing to an unprecedented wet season, and an unusually heavy log traffic carried.

This portion of the track is well tied and equal to the requirements in point of safety.

The Sidnaw trestle (the largest in the State) will be dispensed with during the coming year, a new line being constructed across the basin, composed entirely of earth embankment, with a large culvert.

The interlocking appliances at Wabik, Republic and Sidnaw are found in good, serviceable condition. It was mutually agreed that the practice of allowing trains to stand inside derailed limits at Sidnaw while opposing route was in use, should be discontinued at once.

With reference to complaints by persons in Ontonagon and vicinity of insufficient train service, a number of leading citizens of Ontonagon were interviewed and the expression was unanimous that it would be unreasonable to urge or make issue that a train service exclusively for passengers, baggage and express should be provided under present conditions, but that a service as at present maintained should be afforded daily, except Sundays.

#### CHICAGO & NORTHWESTERN.

The inspection of this line in Michigan was made September 21 and 22.

The track structures, ties and steel on this line are first-class, and surface and alignment are well maintained. The main line of the Peninsula Division, Menominee to Ishpeming, is in especially good condition. The reconstruction of this line in this State, according to the general standards of this company is nearly completed, and very little fault can be found with its condition.

A target was recommended to signal trains over crossing of the D. S. S. & A. Ry. west of Negaunee, and was at once provided.

The motive power and train equipment is good, and first-class service is afforded. Two hundred and twenty-four thousand one hundred and fifty-five new ties were used in renewal in this State, and a large number of bridges rebuilt or repaired.

The blocking of frogs and other rail angles has secured proper attention.

#### CHICAGO & WEST MICHIGAN AND DETROIT, GRAND RAPIDS & WESTERN.

These roads are under the same general management, and are virtually operated as one system. The track on main lines and branches is uniformly first-class, particular attention being given to surface, alignment and proper drainage.

A total of 408,767 ties were used in renewal; 2,864 tons of new steel, 70 pounds to yard, laid in track; 30 bridges and culverts filled, comprising 1,925 linear feet and requiring 4,400 cubic yards of earth, during the present year to October 1.

The fence renewals comprise 4.02 miles of new fence and 24.34 miles rebuilt during the same period.

Bridges and track structures are in good condition, and well maintained.

The station buildings are generally adequate and comfortable, though many were noted that should be renewed in the near future.

The motive power and equipment of these companies compare favorably with any in the State, and the service and management of the entire properties is very satisfactory to this department.

#### CINCINNATI, JACKSON & MACKINAW RAILWAY.

This road was turned over to the Detroit, Toledo & Milwaukee Railway Company on August 1st, 1897.

An inspection of the entire property from Dundee to Allegan, which was made about this time, developed the fact that the surface and alignment of track, and the condition of bridges, was faulty in many places.

The track is generally in need of ballast, and several bridges were found to be weakened by decayed piling and timbers. These points of defect were taken up with the company in detail, and while no considerable amount of ballast has been provided this year, on account of more necessary work, the dangerous structures have been strengthened or are in process of repair.

No switch lights were found on main line switches west of Addison.

Interlocking machinery at the various interlocked crossings was found in good condition.

The general train equipment is good.

#### CLEVELAND, CINCINNATI, CHICAGO & ST. LOUIS RAILWAY.

This road in Michigan extends from Benton Harbor to State line, near Grangers, and is found in good condition.

The status of the track and bridges has been improved during the year, and equipment of service on this line is satisfactory.

A large number of complaints of insufficient right of way fence have been received, and in each instance the fence complained of has been repaired as soon as possible.

We are assured that the cause for these complaints will be soon removed and sufficient fence built along the entire line in this State.

#### DETROIT AND MACKINAC.

The inspection of this road was finished September 4th, and the general condition of the track, bridges and equipment show a decided improvement over previous reports. Nearly the entire main line north of Emery Junction (137 miles) has been rebalasted, and a number of important bridges repaired and 1,550 tons of new rails laid in the track. This includes nine miles of new extension on the north end of the line.

The track and bridges on the Rose City branch found to be in a faulty condition, it being considered that the present state of the track



and structures would not warrant with safety to passengers and property the running of trains at the customary high rate of speed. Therefore, instructions were given from this department to reduce the speed of trains until necessary repairs should be made. Whistling posts for highway crossings are being placed to denote the point at which whistle signals shall be blown.

The motive power, coaches and other passenger train equipments are satisfactory, and equipped with all safety appliances required by law. Freight cars are being supplied with automatic couplers and air brakes.

#### DULUTH, SOUTH SHORE & ATLANTIC.

Inspection made September 17, 18 and 20, 1897.

The condition of the track on the entire system is satisfactory; ties, steel and surface and alignment of track are good.

The station buildings are in poor condition generally, it being represented by the general manager that it had been considered in the best interest of the traveling public and property to use nearly all available money in maintenance of track and permanent way.

The station buildings at Seney, Munising Junction and Michigamme were found to be particularly inadequate for the public convenience and comfort, and on the 8th day of November, 1897, an order was issued requiring reasonable depot and warehouse buildings to be constructed at these points within ninety days from date thereof. The company proceeded at once in compliance with these orders at Munising Junction, but asked a rehearing regarding the other two points named. This was granted, and the matter will be decided at an early date.

Four large bridge structures were found in an unsafe condition, on account of the amount of decayed timber, rendering their strength uncertain. Orders were issued October 9th directing the company to renew or fill these bridges within one year from date of order. Service of these orders was acknowledged with assurance that they would be complied with. An order was also issued requiring a target signal at crossing of Chicago & North Western Railway one-half mile west of Negaunee, which has been complied with.

The Mineral Range Railroad, and Hancock & Calumet Railroad, which are under the same general management, were inspected September 18, 1897.

The Mineral Range Railroad was made standard gauge during the month of September, and is now operated in conjunction with the division of the South Shore line from Marquette. The general conditions, track and equipment, are good and all reasonable facilities are provided for travel or commerce.

The bridge across Portage Lake between Houghton and Hancock is considered unequal to the heavier motive power and traffic of standard gauge equipment. While the bridge has been strengthened in some respects, the factor of safety under conditions above named is uncertain, and a special inspection will be made to ascertain the exact facts in the near future. One hundred and forty-six thousand seven hundred and eleven ties have been placed in the track; 191 tons of new steel laid;

7 bridges rebuilt, comprising 2,861 lineal feet, and 4 bridges filled comprising 1,040 lineal feet, and requiring 65,800 cubic yards of earth.

Frogs and switches satisfactorily blocked.

#### FLINT & PEBE MARQUETTE

The property of this company is in general good condition, considerable improvement having been made in renewal of ties, filling and repairing bridges, etc.

The track improvements include 397,530 ties used in renewal, 192 lineal feet of bridges rebuilt, and 21,520 cubic yards of earth used in filling track openings.

The narrow gauge divisions of this road were found to be much improved, both in condition of track and amount of standard ties put in track, in contemplation of making these divisions standard gauge.

Quite a large number of station buildings were noted that were dilapidated, inadequate for the requirements of public service, and should be renewed. Attention was called to insufficient blocking in frogs and switches, on southern division, and immediate attention was given to this duty.

Interlocking appliances at crossings of this line by railroads, of which there are fifteen, are all in good serviceable condition, except at Clare and Manistee. The former is inadequate, and of poor construction, and the latter, out of use. Both will be properly renewed and maintained at an early date.

The general good reputation of the train equipment and service afforded by this company is maintained.

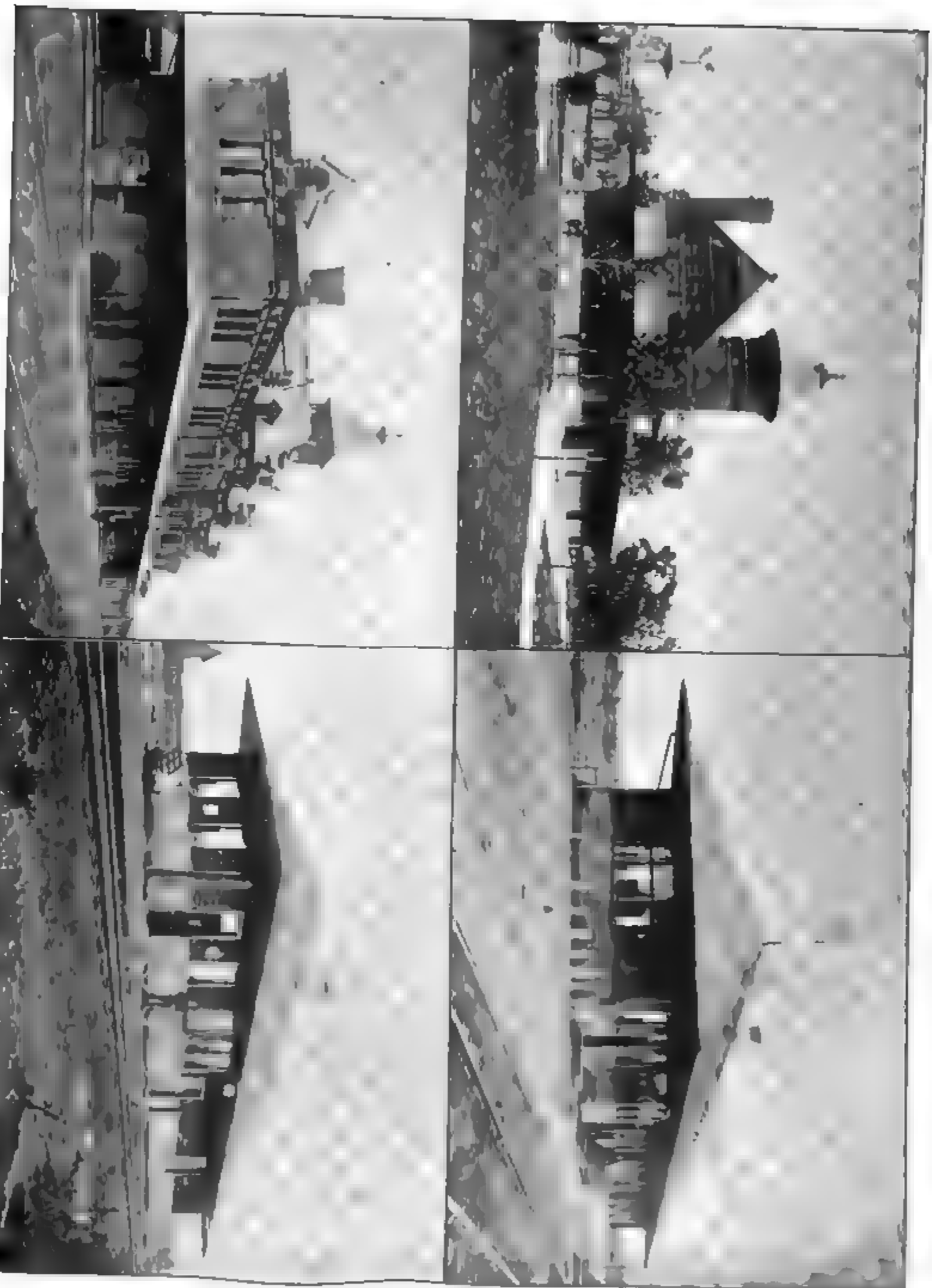
#### GRAND RAPIDS & INDIANA.

Inspected November 24 and 26, 1897.

Improvement is noted in the condition of track on this line in Michigan, especially on the southern division. The northern division has not received as much ballast and the surface and alignment of track is not as good, though no dangerous condition exists. The Traverse City, Missaukee and Manistee branches are well maintained and equal to the necessities. The Muskegon division is in exceptionally good condition and the station buildings and structures are satisfactory. Fences have been provided where necessary, and are in good order. One hundred eighty thousand, six hundred fifty-six ties have been used in renewal, and 617 tons of new steel put in the track during the present year.

This company has planned to renew several of their large bridge structures during the coming year, and a contemplated change of the line between Rockford and Mill Creek will dispense with six truss bridges between these two points which require renewal.

The motive power and equipment compare favorably with any in the State.



SAGINAW, WEST SIDE  
SAGINAW, EAST SIDE

STATIONS OF F. & P. M. R. R.

MONROE  
MT. MCCRIS



## LAKE SHORE &amp; MICHIGAN SOUTHERN.

The main line in Michigan, in point of stability, smoothness and alignment, is as near perfection as is possible in modern railroading. The Detroit, Jackson, Lansing and Kalamazoo divisions are well maintained, and in good shape. The Ypsilanti, Fort Wayne and Adrian divisions, on account of the light traffic carried, are not as well maintained, though all are safe and adequate for the service required.

Extensive improvements have been made to the permanent way, track structures and equipment, on the system during the year. This comprises 107,664 ties used in renewal; 711 tons of new steel, 80 lbs. to yard laid in track; bridges rebuilt, 30, with 1,324 lineal feet; bridges and culverts filled, 41, with 1,103 lineal feet, which required 14,946 cubic yards of material. The character of these improvements was generally permanent, bridge renewals being nearly all of stone and iron.

The motive power and train equipment rank with the best in the State, all modern safety appliances being provided; all frog and rail angles filled with blocks as required by law.

## LAKE SUPERIOR &amp; ISHPEMING.

This road, which is practically new, comprises twenty miles of main line and is used exclusively for the transportation of iron ore from the mines to the dock near Marquette. The track structure is in first-class condition. The motive power and train equipment is very heavy and supplied with all modern safety appliances, and the general operation and management of the property is good. No scheduled trains for public traffic are provided.

## DETROIT &amp; LIMA NORTHERN.

This line is completed and in operation in Michigan from State line in Lenawee county to Tecumseh, using about ten miles of the Wabash Railroad tracks between Seneca and Adrian.

The train service is extended to Detroit from Tecumseh over the tracks of the Detroit, Toledo & Milwaukee, and Wabash railroads.

The material used, and construction of bridges and track structures, is good. The condition of track is fair considering the new grade and the difficulty in keeping track in surface and line. The fences, cattle guards and crossing signs are as yet unfinished, and have been the source of considerable complaint from farmers along the line. These complaints have had due attention, and the company will be required to comply with the law or pay the usual penalties for its violations.

## LOWELL &amp; HASTINGS.

This road was inspected on August 25, and the track was found in generally good condition. Repairs to two bridges was suggested, which the company promised to make at once. Motive power and train equipment equal to the necessities.

**MANISTEE & GRAND RAPIDS.**

This road is exclusively engaged in the transportation of logs and forest products. It consists of 40 miles of main line extending from Manistee to Luther, Lake county. The track structure and rolling stock are in good condition. There is but little fence on the road although it is provided when applied for.

**MANISTEE & NORTHEASTERN.**

This road was inspected on August 19 and 20, and the condition of the track, bridges and equipment was found to be satisfactory. The station building and interlocking machines were found in good order with the exception of the interlocker at the crossing of the F. & P. M. R. R. at Manistee, which is out of use by stipulation pending proposed changes in the crossing and depot grounds. Interlocking devices at Manistee crossing and Interlochen were renewed and approved for use on December 8. The right of way fences were found to be insufficient in many places.

**MANISTIQUE RAILWAY.**

Inspected September 30.

Track and bridges in a reasonably safe condition. Motive power and train equipment satisfactory. No frogs or switches were blocked as required by law, but it was promised that this duty should have immediate attention, which has been fulfilled.

**MASON & OCEANA RAILROAD.**

This is a small road, 27 miles in length, with a very limited traffic and equipment.

The rail in track is 30 pounds to the yard and is badly bent. A large number of ties were put in track during the present year, and while the road would be generally considered unsafe, the light equipment, slow speed, and generally careful operation of the road reduces the danger to a minimum.

**MICHIGAN CENTRAL SYSTEM.**

The main line of this system in Michigan, from Detroit to New Buffalo, is as nearly without fault as it is possible to conceive. The stability and permanence of the line, strength and extra factors of safety in bridge and track structures, the fine architectural designs of station buildings, which are furnished with all reasonable facilities for comfort of patrons, and the excellent train equipment and service, certainly deserve commendation.

There has been installed on the double track on main line, improved block signal systems, which preclude the possibility of real collisions.



M. C. R. R., DEARBORN





The installation and maintenance of these appliances, though expensive, is considered a good investment by the company. A detailed description of this system will be found elsewhere in this report.

The Grand River Valley; Air Line; Toledo, and Bay City divisions, are in very good condition, and equal to all traffic necessities. The Air Line division, over which the heavy through traffic is carried, has been nearly all relaid with heavy steel. The Mackinaw division, though steel on south end is considerably worn, is in safe and serviceable condition. The Saginaw division, though safe, is in need of ballast nearly the entire length. The South Haven, Battle Creek, North Midland, Twin Lakes, and Gladwin branches, are not in as good condition as main divisions, but are safe and adequate for the service required.

The interlocking and block signaling systems are well maintained and very efficient. Requirements in blocking frogs and switches have received proper attention.

#### MILWAUKEE, BENTON HARBOR & COLUMBUS RAILWAY.

This road comprises the St. Joseph Valley Railway Company's property, the operation of which was discontinued by order of this department August 11, 1893, together with 17 miles of new line from Benton Harbor to Berrien Springs.

The old line has been thoroughly and permanently rebuilt with first-class material, all bridges filled or renewed, and with similar construction on the new portion of the line, it is very satisfactory to this department.

The equipment is first-class, and all appliances required by law are provided.

An order was issued July 12, 1897, removing all former restrictions, by this department, and approving the road for public use.

#### MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.

Inspected September 24, 1897.

This line was found to be in a safe and efficient condition. Forty-four bridges or culverts have been filled during the present year, requiring 20,240 cubic yards of earth; 90,202 ties were used in renewal.

The ties, surface, and alignment of track on portion of line east of Gladstone are not as good as western district, but are not in an unsafe condition for the traffic carried.

It is contemplated to put this part of the line in first-class shape during the coming year. The motive power and equipment on this line are excellent and adequate service is afforded. Fences are maintained where necessary, and frogs and switches are blocked as required by law.

#### MUNISING RAILWAY.

This road, now extended from Munising to Little Lake, on the Chicago & Northwestern Railway, 38 miles, has lately been opened through to the western terminal for public traffic.

The construction of the line, condition of rolling stock and traffic operation is satisfactory to this department.

PONTIAC, OXFORD & NORTHERN.

Two inspections of the entire property of this company have been made by this department during the year.

The first inspection was ordered on account of a number of specific complaints, that the road was unsafe for public traffic.

The report of this inspection, made early in June, which was very thorough, developed the fact that the condition of the track and bridges was as stated in complaints, and required immediate attention by this department.

The chief faults specified were rotten ties, insufficient ballast, and decayed timber in bridges and track openings.

The matter was taken up with the president and general superintendent of the company, with a view to mutually agree to put the road in safe condition.

On August 25, a letter was received from Hugh Porter, president of the company, outlining work to be done, and material to be used in putting the road in safe condition, and to be finished on October 31.

Among other specifications, all decayed ties were to be removed and replaced with new ties; the road bed to be ballasted where needed, and track lifted and lined the entire length of the road; all decayed or partly decayed timbers or materials in bridges, culverts or cattle guards, to be replaced with new material.

This showing was satisfactory, and further action was deferred until early in November, when a second inspection was made, by two competent experts, for this department, and a report of this inspection showed that the stipulations made by President Porter had not been carried out.

That at least 30 per cent of the ties remaining in the track were in a decayed condition; that ballast had been distributed over about 30 per cent of the line, and about 50 per cent of the entire line had been lifted and lined, about three miles of gravel not having been put under the track, this portion requiring renewal of ties before track could be lifted.

It was submitted that the number of ties in the track, about 2,300 to the mile, was too few, with steel 56 pounds to the yard, for successful and safe operation, considering the heavier and increased traffic carried, and that there should be at least 2,700 ties to the mile.

On this basis, there should be at least 100,000 ties placed in the track during the coming year, and for safe operation during this winter, at least 5,000 should be placed in the track at once, at the weakest places, and where ballast was distributed.

Decayed timber or piles were found in eight bridges or track openings, and it was recommended that trains should be restricted to six miles per hour over these structures until properly repaired.

It was also submitted that switch lights should be placed on main track switch stands.

Upon receipt of this report, an order was issued, November 19, requiring the company to make the repairs recommended, within thirty days, also ordering restricted speed of trains over defective structures until



M. C. R. R., WAYNE



repairs were completed and that switch lights should be provided within the same time.

Assurance was given that this order would be complied with and the work is now in progress.

The station buildings, motive power and train equipment have been placed in a good condition.

The following return was received from the company:

PONTIAC, MICH., Dec. 20, 1897.

Hon. Sybrant Wesseliuss, Commissioner of Railroads, Lansing, Mich.:

Dear Sir—In the matter of the order issued to Pontiac, Oxford & Northern R. R. Co., dated Nov. 20, 1897, I beg to submit the following return:

New ties have been placed in the track at points where needed, to wit: in Oxford yard, in the cut north of Oxford, thence to the summit of Dryden Hill, and all places where ballast is distributed and not put under track, with the exception of about one-half mile on sections 15 and 16, where ties are in good shape, but track has not been lifted owing to the setting in of bad weather before it was reached. This piece of track is in perfectly safe condition for the winter, but it will be lifted as soon as weather permits. In all, 2,676 new ties have been put in track since November 10.

Two auxiliary stringers have been placed in Cole Lake bridge, all decayed material renewed in Paint Creek bridge, and cattle passes Nos. 28, 31, 33 and 46, and culverts at Miller's Crossing, and Nos. 95, 121 and 209, and Caseville bridge. Also other openings not specified in the order.

Lamps have been placed on switch stands in Pontiac and Oxford yards, and lamps ordered from manufacturers for all other main line switch stands, which are promised not later than the 27th inst. All main line switches will be equipped with lamps before 31st inst. An effort was made to have the lamps on stands within the time limit of the order, but manufacturers could not supply them.

Under these circumstances, I trust it will not be necessary to reduce the speed of trains as indicated in the order.

Yours truly,

W. C. SANFORD,

General Superintendent.

**SAGINAW, TUSCOLA & HURON.**

This road was found in good condition. The bridge structures are nearly all of stone and iron, and the surface and alignment of track is very good. About five miles of heavy steel has been used in replacing the light steel on east end of line. It was noted that the noxious weeds had not been cut in many places and had gone to seed.

Whistling posts for highway crossings are being put in position.

## SOUTH HAVEN &amp; EASTERN.

This road shows improvement in general conditions.

Arrangements have been perfected to make standard gauge of track, over six miles of heavier steel having been laid during the year, and it is expected that the entire line will be made and operated standard gauge in the early spring.

The steep grades have been considerably reduced.

Motive power and equipment have been improved and service is satisfactory.

## VANDALIA LINE.

The portion of this line in Michigan extends from St. Joseph to Galien, about 24 miles.

The condition of the road and service is satisfactory, no complaints having been received, except pertaining to fences, which were speedily adjusted, to the satisfaction of those concerned.

## WABASH.

The line of this company in Michigan, extending from Detroit to North Morenci, 73 miles, was found in good condition. Oak ties are used and the track maintenance is excellent. Criticisms were made on condition of crossing frogs at Delray crossing of M. C. R. R., which are being renewed, and the bridge across Raisin river, near Adrian, which it is arranged to renew at once, the material being on the ground.

Equipment and service is excellent, and frogs and switches are blocked as required by law.

## WISCONSIN &amp; MICHIGAN.

The line of this company in Michigan extends from Fisher to Faithorn Junction, 24 miles.

The permanent way on this road is fair, although deficient in ballast, is well tied, and considering the slow time schedule for trains, is not unsafe.

Equipment is in good condition, and well provided with safety appliances required by law.

It may be added that an important factor in the revenues of this road is a car ferry line from Peshtigo, Wisconsin, to Chicago and other lake ports.

## COMPLAINTS AND PETITIONS.

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January 19, 1897, petition was received from W. J. Reed, highway commissioner of Carp Lake township, Emmet county, requesting a highway crossing over the Grand Rapids & Indiana Railroad at Levering. After the necessary right of way had been secured, an inspection of the proposed crossing was made by the department. An order, with plans and specifications attached, was issued March 3, 1897.

January 26, complaint was received from D. S. Barrett of Clyde, Oakland county, alleging that the view of trains approaching the Flint & Pere Marquette railroad crossing at Clyde was so obstructed as to render the crossing dangerous, and requesting proper protection. After an inspection had been made by the department and a hearing afforded all parties interested, it was agreed that the crossing should be moved twenty feet north, and an order was issued for an electric alarm bell at said crossing.

January 30, resolutions of the common council of the city of Grand Rapids were received, charging that the Grand Rapids & Indiana, and Detroit, Grand Rapids & Western railroad crossing, on Sixth street, in said city, was not properly protected, and requesting a watchman and gates. After an inspection by the department and a hearing had been afforded to all parties interested, an order was issued, February 3, compelling said railroad companies to erect gates and station a watchman at said crossing.

February 1, petition from Joseph Wendel of Jackson county was received, requesting a farm crossing over the Lake Shore & Michigan Southern Railway between Woodstock and Brooklyn. After an inspection of the proposed crossing by the department, the railway company was notified of the petition and requested to put in said crossing. On February 12, company reported that the request had been complied with.

February 4, petition of W. Dyskerhuis, highway commissioner of Muskegon township, Muskegon county, was received, requesting a crossing over the Chicago & West Michigan Railway at the intersection of the so-called Laketon road. This matter was investigated by the department and it was found that the road in question ceased to be a highway in 1873, and that the crossing could not therefore be ordered put in at the expense of the railroad company. Application denied.

February 10, petition of John Jones of the village of Galien, Berrien county, was received, requesting a farm crossing over the tracks of the

Indiana & Lake Michigan Railroad Company. After an inspection by the department, it was determined that the crossing was unnecessary, and the prayer of the petitioner was denied on February 10.

February 10, complaint was received from the common council of the city of Benton Harbor, charging that the protection at the intersection of the Cleveland, Cincinnati, Chicago & St. Louis Railway and the St. Joseph Valley Railway, on Territorial street in said city, was inadequate, and requesting that proper protection be ordered. After an inspection by the department and a hearing afforded to all parties interested, the above named railroad companies were ordered, February 25, to station a watchman at said crossing.

February 11, resolutions of the common council of the city of Detroit were received, alleging that the Michigan Central, Grand Trunk, and Lake Shore & Michigan Southern railroad crossing at Beaubien street, in said city, was not protected, and requesting that gates be ordered for the same. This matter was inspected by the department and a hearing of all parties interested was had, and, on April 8, the railroad companies above named were ordered to provide an electric bell for said crossing.

February 16, complaint was received from the village of Fremont, Newaygo county, alleging that the protection at the Chicago & West Michigan Railway crossing in that village was inadequate. After an inspection by the department, the company was ordered to flag all trains over said crossing, on and after May 25.

February 18, complaint was received from the common council of the village of Chelsea, charging that the crossing of the Michigan Central railroad, on Main street, in said village, was not properly protected, and requesting a flagman at said point. After an inspection had been made of the premises, the railroad company was ordered, on May 19, to station a flagman at said crossing.

February 24, complaint was received from M. M. Bennett, highway commissioner of Seneca township, Lenawee county, alleging that the crossings over the Detroit & Lima Northern Railway, in said township, were in bad condition and impassable for teams. On the same date the company was notified of said complaint and requested to make the necessary repairs at once. No further complaint received.

March 1, complaint was received from the township of Springwells, Wayne county, alleging that the crossings of the Michigan Central, Lake Shore & Michigan Southern, Wabash, and Detroit, Grand Rapids & Western railroad companies, on the Dearborn road, Waterman avenue, Langlois avenue, and the Exposition track, were not properly protected. Careful inspection was made of these crossings by the department, and the railroads above named were ordered to station flagmen at the Dearborn road, Waterman and Langlois avenues, and to stop all trains before crossing the so-called Exposition tracks, and that the trainmen flag said trains over said crossing.

March 2, complaint of James J. Munson of Fairfield township, Shiawassee county, was received, alleging that the fence between his property and the Ann Arbor Railroad right of way was not properly constructed. The company was notified of the complaint and they agreed to rebuild the same. On July 12, the work was inspected by this department and found to be in compliance with the statute.



March 2, complaint was received from the township board of Wyoming, Kent county, stating that the crossing of the Grand Rapids & Indiana and Michigan Central railroads, on Burton avenue, was in a dangerous condition, and requesting a flagman at the same. This crossing was inspected by the department, and no further protection was deemed necessary.

March 3, complaint was received from the common council of the city of Hudson, charging that the Lake Shore & Michigan Southern Railway crossings on Church, Market and Lane streets, in said city, were in an unsafe condition, and requesting additional protection. An inspection of these crossings was made by the department on March 16, and said railway company was ordered to maintain electric alarm bells at Market and Lane streets, to be operated by a watchman at Church street.

March 7, complaint was received from the village of Dearborn, Wayne county, alleging that the Michigan Central Railroad, crossing on Mason street, in said village, was not properly protected. An inspection of the premises was made by the department and a hearing afforded to all parties interested, after which said railroad company was ordered to station a flagman at said crossing.

March 11, petition was received from the residents of Marcellus, Cass county, requesting additional protection at all Grand Trunk Railway crossings in said village. An inspection was made of the several crossings by the department and a hearing afforded to all parties interested, and on March 16 the railway company was ordered to place electric alarm bells at three crossings in said village.

March 15, complaint was received from Frank Sharp of Howell, charging that the crossing of the Detroit, Grand Rapids & Western Railroad, between Howell and Howell Junction, was frequently blocked by trains standing on the same, and that the planking in said crossing was in an imperfect condition. On March 24, the railroad company was informed of the complaint, and in reply denied the charges therein made, after which the matter was investigated by the department and the planking at said crossing was found to be in first-class condition.

March 19, complaint was received from Jesse Thompson of Bear Lake township, Manistee county, stating that the Manistee & Northeastern Railroad Company's fence, adjacent to his property in the village of Chief, was not properly constructed. On March 31, the railroad company was informed of the complaint and requested to repair said fence. No further complaint was received.

March 23, petition was received from L. K. Stein, highway commissioner of Bloomfield township, Saginaw county, requesting a new crossing in said township over the Michigan Central Railroad. After the required right of way had been secured and an inspection had been made by the department of the proposed crossing, an order, with plans and specifications attached, was issued.

March 29, complaint was received from Alfred Garlock of Howell township, Livingston county, alleging that the grade of the tracks of the Ann Arbor Railroad had been raised and rendered the farm crossing of the complainant impassable. This matter was called to the attention of the railroad company on March 30, with a request that the same be repaired at once, which said request was complied with.

March 30, complaint was received from William Hanrahan of Bath, Clinton county, stating that the fence between the Michigan Central right of way and his property was insufficient. On April 1, the company was notified of the complaint, and on April 22 word was received from Mr. Hanrahan that said fence had been repaired.

April 1, complaint was received from John Mitchell of Carland, Shiawassee county, alleging that the Ann Arbor Railroad Company's fences adjacent to his property had never been completed. On April 9, the company was ordered to complete said fences. The order complied with.

April 7, complaint was received from John Mitchell of Rush township, Shiawassee county, charging that the Ann Arbor Railroad Company's fence was insufficient to afford protection for cattle. The company's attention was called to the complaint and they agreed to repair the fence at once. At a later date the work was inspected by the department and found to be in compliance with the statute.

April 7, complaint was received from L. A. Beadle of Augusta, alleging that since the alteration had been made in the grade of the Cincinnati, Jackson & Mackinaw Railway, it was impossible for him to reach a portion of his farm located on the opposite side of the track; he also stated that for a certain consideration he would waive his claim for a crossing. On April 9, this complaint was referred to the railroad company, and on April 26 a meeting was arranged between them, and as no further complaint was received the case was closed.

April 11, complaint was received from the city of Saginaw alleging that the blocking of the rails and frogs of the Michigan Central Railroad, at the Genesee avenue crossing, was defective and dangerous. After an inspection had been made of the crossing in question, the railroad company was ordered to place new frogs at said crossing.

April 12, Petition was received from William E. Short of Swartz Creek, alleging that the Chicago & Grand Trunk Railway crossing, on Main street in said village, was not properly protected. An inspection of the crossing was made by the department and additional protection found to be unnecessary.

April 16, petition was received from residents of the village of Mackinaw, requesting that a flagman be ordered stationed at the Michigan Central and Grand Rapids & Indiana railroad crossing, on Huron street, in said village. An inspection of this crossing was made by the department and a hearing afforded to interested parties, and the railroad companies were ordered as follows:

That no cars or engines be allowed to stand or remain within 20 feet of the street limits; that the speed of engines and trains be not to exceed 6 miles per hour while passing crossing, and that passenger trains be made up at some other place than upon or over this crossing, and that the planking of the entire crossing be raised one-half inch above the surface of the rails in the tracks, as required by law.

April 20, petition was received from Michael Speck, highway commissioner of Beaugrand township, Cheboygan county, requesting a highway crossing over the Michigan Central Railroad, in said township. After the necessary right of way had been secured and inspection had been made of the proposed crossing, an order, with plans and specifications, was issued June 28.

April 21, complaint was received from the residents of the village of Wayne, alleging that the Michigan Central Railroad crossing, on Sophia street, in said village, was not properly protected. This matter was investigated by the department and a hearing of all parties in interest had. The railroad company was ordered to station a flagman at said crossing.

April 22, complaint was received from E. Pruin of Spring Lake, Ottawa county, alleging that the crossing at the village limits in Spring Lake, which had been in use more than 30 years, was obstructed by the Detroit, Grand Haven & Milwaukee Railway, and requesting that steps be taken to have said obstruction removed. After an inspection had been made of the crossing, the D., G. H. & M. R'y Co. was notified of the complaint and requested that the prayer of the petitioner be granted. On July 15, word was received from said railway company stating that said crossing was a private crossing and declaring that it was the policy of the road to have all highway crossings legally opened. On July 20, the communication was referred to Mr. Pruin, and satisfactory arrangement was made between the parties.

April 22, resolutions of the common council of the city of Detroit were received alleging that the Michigan Central, Grand Trunk, and Lake Shore & Michigan Southern crossings, on 14th avenue, were improperly protected, and requesting that said crossings be provided with gates. Personal inspection of the crossings was made by the department, and it was agreed that gates would not improve the protection at this point.

April 24, resolutions were received from the village of Belding charging that the Detroit, Grand Rapids & Western Railroad crossing, on Bridge street, in said village, was not properly protected. An inspection was made of the premises and a hearing afforded to all parties interested. The above named railroad company was ordered to station a flagman at said crossing when in use.

April 30, complaint was received from the common council of Pontiac, alleging that the Detroit, Grand Haven & Milwaukee Railway crossings, on Wesson street and Orchard Lake avenue, in said city, were not properly protected. An inspection was made by the department, and on June 12 said company was ordered to place an electric alarm bell at the Wesson street crossing, and petition denied as to Orchard Lake avenue crossing.

May 6 complaint was received from the village of Deerfield, alleging that the planking in the main crossing of the Lake Shore & Michigan Southern Railway in said village was not wide enough to accommodate traffic on said crossing. Said company was requested to widen said crossing, which request was complied with.

May 11 complaint of Mrs. J. H. Thompson of Evangeline township, Charlevoix county, was received, stating that the fence had not been constructed between the Boyne City & Southeastern Railway Company's right of way and her property. The company was notified of said complaint and, after a limited correspondence, word was received that said fence had been ordered erected.

May 11 complaint was received from D. W. Gould of Bimo, Lenawee county, alleging that the fences of the Detroit & Lima Northern Railway Company adjacent to his property had not been constructed. On

May 15 the matter was investigated by the department, and on May 19 a formal order was issued against said railway company to construct said fence within fifteen days.

May 22 petition was received from Harmon Gregory of Hartford township, Van Buren county, alleging that the South Haven & Eastern Railroad Company's fence adjacent to his property was in need of repairs. After an inspection of the premises named in the petition the fence was ordered constructed.

May 22 petition was received from the village of Zeeland, Ottawa county, requesting additional protection at the Chicago & West Michigan Railway crossing in said village. This matter was investigated by the department, and on June 3 an order was made compelling said railway company to widen the planking of said crossing and to station a flagman at the same, which said order was complied with.

May 28 complaint was received from C. W. Cromwell of the village of McBain alleging that the crossing of the Ann Arbor Railroad on Euclid avenue had been closed by said railroad company to the great inconvenience of the public. An investigation was made of the premises, and it was found that they had not acquired the right of way and pending a settlement between the village and said railroad company, a flagman was ordered stationed at the only remaining crossing in said village.

June 1 complaint was received from William Hogg of Nessen City, Benzie county, alleging that the connecting fence at the road crossing of the Manistee & Northeastern Railroad, a short distance from said village, was improperly constructed. On June 3 said company was notified of said complaint, and on June 16 reply was received from them stating that said fence had been approved by this department in 1896 on receipt of a similar complaint.

June 3 petition was received from Fred G. Walters, highway commissioner of Beaverton township, Gladwin county, requesting two highway crossings over the tracks of the Flint & Pere Marquette Railroad Company in said township. After the necessary right of way had been secured, orders with plans and specifications were issued for said crossings on June 10 and June 25, respectively. On June 30 word was received from said petitioner that the work on said crossings was in process of construction.

June 12 complaint was received from the residents of the village of Lawton, alleging that the planking at the Main street crossing of the Michigan Central Railroad in said village was too narrow to accommodate traffic at said crossing. On June 12 the railroad company was ordered to widen said crossing to thirty-two feet. The order was complied with.

June 15 complaint was received from W. J. Jennings of Wise township, Isabella county, requesting a highway crossing over the Flint & Pere Marquette Railroad Company's tracks in Wise township. On June 19 petitioner was informed of the necessary steps to be taken for acquiring the right of way. On October 7, having secured the necessary right of way, an order with plans and specifications attached was issued.

June 19 complaint was received from W. H. S. Wood of the village of Cohoctah, Livingston county, charging that the highway crossing of the Ann Arbor Railroad, known as Houtailing crossing, near said village, was dangerous to the traveling public. An investigation was made of this crossing, and a hearing afforded to all interested parties. It was decided that if the whistle was sounded when trains approach said crossing no further protection would be necessary, order to which effect was issued.

June 19 petition of Nathan Lefler of Bentley, Bay county, requesting a crossing over the Michigan Central Railroad in said town was received. On June 20 said petitioner was advised to secure the necessary right of way. On November 12, upon receipt of the evidence showing that the necessary right of way had been secured, an order with plans and specifications was issued for such crossing.

June 19 petition was received from Peter Cody, highway commissioner of Pinconning township, requesting a crossing over the Michigan Central Railroad in said township. On October 2 evidence was sent showing that the necessary right of way had been secured. October 6 an order with plans and specifications attached was issued for said crossing.

June 25 complaint was received from D. O. Holden, highway commissioner of Bellevue, alleging that the Lime Kiln crossing over the Grand Trunk Railway, one-half mile west of Bellevue, was in a dangerous condition, and the planking but nineteen feet wide. After inspection of the premises the railroad company was ordered on July 9 to widen the roadway to twenty-four feet.

June 25 complaint was received from the residents of Gun Plains township, Allegan county, alleging that the Hunt crossing, so called, over the Grand Rapids & Indiana Railway, was in a dangerous condition, requesting that the railway be ordered to lay tile and fill the ditch at said crossing so that teams could drive directly across said tracks. This petition was referred to the railroad company July 3 and request was promptly granted.

June 25 complaint was received from the residents of the city of Ann Arbor alleging that the planking on the various crossings of the Ann Arbor Railroad in said city were in need of repairs. On July 9 the company was ordered to repair all crossings in said city where necessary.

June 25 complaint was received from the common council of Reed City charging that the Grand Rapids & Indiana and Flint & Pere Marquette railroad crossings on Slosson avenue and Main street, were improperly protected. An investigation was made of these crossings by the department and a hearing afforded to interested parties. On July 9 said railroad companies were ordered to flag all trains over said crossings.

June 26 complaint was received from the common council of the city of Detroit alleging that the Union Station and Terminal Association crossing on Military avenue in said city was not properly protected, and asking that a watchman be stationed at this point. Careful investigation was made of the necessity for additional protection

at this crossing, and on July 8 a flagman was ordered stationed at said crossing.

June 26 complaint was received from A. A. Ellis, mayor of Ionia, alleging that the Detroit, Grand Rapids & Western and Detroit, Grand Haven & Milwaukee crossing on Steel street in said city was in need of additional protection. This matter was taken up and an inspection made by the department, and on August 11 the companies were ordered to station a flagman at said crossing.

June 27 petition was received from Mrs. Halladay and Mrs. West, living about three miles west of Battle Creek, requesting a farm crossing over the tracks of the Michigan Central Railroad at this point. An investigation of the premises was made by the department, the company notified of the petition, and the crossing ordered built.

June 28 petition from Dr. C. M. Glass of the village of Corey, Cass county, was received, requesting a farm crossing over the tracks of the Michigan Central Railroad Company near said village. After an investigation of the premises by the department, a satisfactory arrangement was made with the company for the crossing.

June 28 complaint was received from Charles Butts of Niles, alleging that the Cleveland, Cincinnati, Chicago & St. Louis Railway fence adjacent to his property was in poor condition, and asking that the same be ordered repaired. On July 14 said railroad company was notified of the complaint, and on July 24 reply was received that said fence had been repaired. On August 13 a second complaint was received from Mr. Butts claiming that although the fence had been repaired it was still inadequate for the protection of his stock, after which a personal inspection was made by the department and the style of fence in use at the point in question approved by the commissioner.

July 6 complaint was received from the residents of Hillsdale, Hillsdale county, alleging that the Lake Shore & Michigan Southern Railway crossing on West street, in said city, was not properly protected. After investigation by the department, the railway company was ordered on August 5 to station a flagman at said crossing, which order was complied with.

July 6 complaint was received from the highway commissioner of the township of Plymouth, Wayne county, stating that the Flint & Pere Marquette Railroad crossing south of Northville station was in need of additional protection, and asking that the same might be ordered. A personal inspection of the crossing in question was made by the department and a hearing afforded to all parties interested, and on July 9 the railroad company was ordered to operate an electric alarm bell at said crossing. The order was complied with.

July 12 complaint was received from Z. Cook, of Adrian, stating that the line fence between his property and the right of way of the Detroit & Lima Northern Railway had not been constructed, and asking that an order be made to compel them to construct the same within a reasonable time. On July 17 complaint was referred to the railroad company, and on July 20 word was received that the fence would be constructed at once.

July 12 complaint was received from G. B. Garlinghouse of Tecumseh, Lenawee county, alleging that the Detroit & Lima Northern Railway

fence adjacent to his property had not been constructed. On July 20 the railway company was notified of the complaint, and on July 22 word was received that the same would be built at once.

July 15 complaint was received from Mr. Williams of Seneca township, Lenawee county, stating that the Detroit & Lima Northern Railway Company had neglected to build the fence adjacent to complainant's property. On July 20 the railway company was notified of the complaint. July 22 a telegram was received stating that the fence would be constructed at once.

July 16 petition was received from G. W. Dickinson of Pontiac requesting information as to the necessary steps to be taken to secure a crossing over the Detroit, Grand Haven & Milwaukee Railway at Sanderson avenue in said city. On July 17 the petitioner was informed as to the requirements in such case, and the matter is still unfinished.

July 18 complaint was received from James La Munion of Derby, Berrien county, alleging that the fence between his property and the Indiana & Lake Michigan Railway Company's right of way had not been built. After an inspection had been made of the location in question an order was issued September 2 compelling said railway company to construct said fence.

July 19 complaint was received from E. Dean of Lake Cora stating that the South Haven & Eastern Railroad Company's fence adjacent to complainant's property for a distance of eighty rods had not been constructed. On July 20 said railroad company was notified of said complaint, and on July 31 word was received that said fence had been completed.

July 23 petition was received from the common council of the city of Grand Rapids requesting better protection at the Detroit, Grand Haven & Milwaukee Railway crossing on Lafayette street in said city. Inspection of this crossing was made by the department and a hearing afforded to all parties interested. On August 11 an order was issued directing the railway company to transfer their watchman from Clancy street to Lafayette street and to place an electric alarm bell at the Clancy street crossing, which said order was complied with.

July 28 complaint was received from John E. Fisher of Eau Claire alleging that the Cleveland, Cincinnati, Chicago & St. Louis Railway had not constructed its right of way fence adjacent to complainant's property. On August 4 said railway company was notified of said complaint, and on September 13 word was received that said fence had been completed.

August 10 petition was received from Charles E. Kane, highway commissioner of Martiny township, Mecosta county, for a proposed crossing over the Detroit, Grand Rapids & Western Railway at Chippewa Lake. Old plans for a crossing, issued two years previous, were returned, petitioner requesting new plans for the same. New plans and specifications were issued on August 10. On September 2 communication was received from the railroad company stating that the right of way for said crossing had not been granted, but consenting to construct said crossing provided said township pay the expense thereof. This proposition was submitted to Mr. Kane, and as yet no reply has been received.

August 18 complaint was received from Thomas Mars of Berrien Center, Berrien county, alleging that the Cleveland, Cincinnati, Chicago & St. Louis Railway fences adjacent to his property were in need of repairs. An investigation was made of the location in question, and an order was issued September 2 for the reconstruction and repairing of said fence.

August 19 petition of George W. Sickles of Wolverine, Cheboygan county, asking whether petitioner could be allowed to use one of the private crossings of the Michigan Central Railroad Company adjoining his farm. He was advised that the matter would be investigated by the department. After such investigation it was decided that the department had no jurisdiction in the premises.

August 26 complaint was received from the common council of the city of Detroit alleging that the Lake Shore & Michigan Southern Railway, Michigan Central and Wabash railroads crossing on Hastings street in said city was not properly protected. After a careful inspection of the premises by this department and a hearing given to all parties interested, on October 12 a flagman was ordered at said crossing. Said order has been complied with.

August 26 complaint was received from the board of education at Iron Mountain alleging that the Chicago, Milwaukee & St. Paul Railway crossing at D street was not properly protected. An inspection of the premises was made on September 22, and it was found that the railway company of its own accord had stationed a flagman at this crossing on September 14.

September 3 complaint was received from D. B. Cunningham of Boyne City, Charlevoix county, alleging that the fence between his property and the Boyne City & Southeastern Railroad Company's right of way had not been erected. Said company was notified of the complaint, and on October 8 word was received from Mr. Cunningham that said fence had been completed.

September 7 complaint was received from Robert S. Savage of Madison township, Lenawee county, stating that the connecting fence, wing fences and cattle guards had not been constructed by the Detroit & Lima Northern Railway Company between his property and its right of way. On September 11 Mr. Savage was requested to make a formal complaint, which was received on October 4. On that date said railway company was requested to erect the same at once. On October 7 reply was received that the same would be constructed immediately.

September 17 petition from the residents of Newberry township, Cass county, requesting that gates or bells be provided at Michigan Central Railroad crossings east of Jones in said township. After an inspection of this crossing by the department and a hearing given to all interested parties, an order was issued October 5 directing said railroad company to operate an electric alarm bell at this point, which said order was complied with.

September 20 complaint was received from B. Q. Goodrich of Nottawa, Nottawa township, St. Joseph county, charging that the Grand Rapids & Indiana Railway crossing one-half mile north of Nottawa is steep, narrow and in a very dangerous condition. The company was noti-



fied of the complaint, and word was received from them December 10 that the crossing had been placed in proper condition.

September 22 complaint was received from W. J. Woolston of Luther stating that the line fence between his property and the right of way of the Grand Rapids & Indiana Railway Company had not been constructed. On September 24 said railway company was informed of said complaint, and on October 6 reply was received that the work on the same would be commenced at once.

September 23 complaint was received from H. D. Van Camp of Hartford township, Van Buren county, alleging that the South Haven & Eastern Railroad Company's fences adjacent to complainant's property had not been erected. On September 24 an order was issued directing said railroad company to construct said fences within fifteen days.

September 24 complaint was received from George S. Stoddard of Rodney, Mecosta county, stating that the Detroit, Grand Rapids & Western Railroad Company had not constructed its fences between his property and the company's right of way. Said company was notified at once of the complaint, and requested to build said fence, which request was complied with.

October 1 complaint was received from John Diebel of Winsor township, Huron county, alleging that the farm crossing at said point over the Saginaw, Tuscola & Huron Railroad had been closed. On October 18 inspection was made and agreement consummated with said railroad company to reopen said crossing at once.

October 7 petition was received from the common council of the city of Detroit praying that a watchman be placed at Summit, Ferdinand and Campbell avenues crossing over the Union Station and Terminal Association's tracks in said city. After a careful investigation had been made and a hearing afforded to all interested parties, it was agreed that a bell should be placed between Summit and Ferdinand avenues, and on October 19 an order to that effect was issued, which said order has been complied with.

October 9 complaint was received from the residents of the village of Ceresco alleging that the depot of the Detroit, Toledo & Milwaukee Railway Company was burned on June 25, and requesting that a new one be constructed. A personal investigation of the premises was made by the department, and the railway company agreed to rebuild the same immediately.

October 25 complaint was received from E. S. Reist of Ashley, Gratiot county, alleging that the natural water course had been obstructed by the Toledo, Saginaw & Muskegon Railroad in Washington township. This matter is still under consideration by the department.

October 29 complaint was received from the common council of Howell stating that the approaches of the bridge over the Ann Arbor Railroad were in dangerous condition. After investigation by the department the company was notified of the complaint, and a reply was received agreeing to make the necessary repairs.

November 1 complaint was received from S. E. Bevier of Clarksville alleging that the Lowell & Hastings Railroad Company was charging five cents per mile for passenger traffic on its road. An investigation of this charge was made by the department, and the complaint was

referred to the railroad company with a request to comply with the law in this regard.

November 4 petition from Andrew Walling, highway commissioner of Mellen township, Menominee county, requesting a highway crossing over the tracks of the Chicago & North Western Railway in said township. After the necessary right of way had been secured and an investigation made of the premises by the department, on November 16 an order with plans and specifications attached was issued.

November 5 petition was received from the common council of the village of Plymouth requesting additional protection at Main street crossing of the Flint & Pere Marquette Railroad, and also at the first crossing east of the union depot over the Detroit, Grand Rapids & Western Railroad, in said village. After a personal investigation by the department of the crossings in question, a flagman was ordered at the Main street crossing on November 16, and the Detroit, Grand Rapids & Western Railway Company was ordered to reduce the speed of all trains to six miles per hour at the other crossing.

November 8 petition was received from Frank H. Beard of Detroit requesting additional protection at the crossing of the Union Depot Company's tracks on Waterman avenue, in Springwell township. A careful investigation of the premises was made by the department, and the additional protection was deemed unnecessary. Therefore the prayer of the petitioner was denied.

November 19 complaint was received from the city of Adrian in regard to the crossings of the Detroit & Lima Northern, the Wabash, and Lake Shore & Michigan Southern Railways in that city, alleging that the same were in dangerous condition. A personal investigation of the several crossings in that city was made on November 23, and the matter is still unfinished.

November 22 complaint was received from E. S. Reist of Ashley, Gratiot county, alleging that the Ann Arbor Railroad Company had obstructed a drain in Washington township, in said county, and refused to reopen the same. This matter is still under consideration by the department.

## OFFICIAL ORDERS.

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ISSUED BY THE COMMISSIONER OF RAILROADS OF THE STATE OF  
MICHIGAN, FROM NOVEMBER 27, 1896, TO DECEMBER 1, 1897.

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1896.

1. Nov. 27. To F. A. Forbes, general manager of the Michigan Telephone Company, and J. M. Whitman, general manager of the Chicago & North Western Railway Company:

Special order permitting telephone company to string four wires over the tracks of the C. & N. W. Ry. on Maple and Chapin streets, between Fifth and Sixth streets, in the city of Iron Mountain, county of Dickinson, Michigan.

2. Nov. 27. To Henry Gorton & Son, Waterloo, Michigan, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting Henry Gorton & Son to string telephone wire over the tracks of the M. C. R. R. one mile west of the village of Chelsea, county of Washtenaw, Michigan.

3. Nov. 30. To the president of the village of Vicksburg, Michigan, and A. B. Atwater, superintendent of the Grand Trunk Railway system, western division:

Special order permitting the village to string electric light wires over the tracks of the C. & G. T. Ry. in Vicksburg, Michigan.

4. Nov. 30. To the president of the village of Vicksburg, Michigan, and J. H. P. Hughart, general manager of the Grand Rapids & Indiana Railway Company:

Special order permitting the village to string electric light wires over the tracks of the G. R. & I. Ry. in Vicksburg, Michigan.

5. Dec. 4. To F. R. Deckrow, commissioner of highways of Grayling township, Crawford county, Michigan, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order of plans and specifications for highway crossing in the township of Grayling, county of Crawford, Michigan.

6. Dec. 4. To the Lansing water works and electric light board, H. B. Ledyard, president of the Michigan Central Railroad Company, and Charles M. Heald, receiver of the Detroit, Lansing & Northern Railroad Company:

Special order permitting the board to string electric light wires over the tracks of the M. C. R. R. and D., L. & N. R. R. on Michigan avenue, Lansing, Michigan.

7. Dec. 7. To F. A. Forbes, general manager of the Michigan Telephone Company, and J. D. Hawks, president of the Detroit & Mackinac Railway Company:

Special order permitting telephone company to string wires over the tracks of the D. & M. Ry. at North Bay City, Michigan.

8. Dec. 7. To F. A. Forbes, general manager of the Michigan Telephone Company, H. B. Ledyard, president of the Michigan Central Railroad Company, and Charles M. Heald, receiver of the Detroit, Lansing & Northern Railroad Company:

Special order permitting telephone company to string wires over the tracks of the M. C. R. R. and D., L. & N. R. R. on Shiawassee street, Lansing, Michigan.

9. Dec. 7. To F. A. Forbes, general manager of the Michigan Telephone Company, and S. T. Crapo, general manager Flint & Pere Marquette Railroad Company:

Special order permitting telephone company to string wires over the tracks of the F. & P. M. R. R. at Atlantic street, Bay City, Michigan.

10. Dec. 8. To Michael A. Sommerfield, commissioner of highways of Merritt township, Bay county, Michigan, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order of plans and specifications for highway crossing in the township of Merrit, county of Bay, Michigan.

11. Dec. 8. To E. K. Warren, president village of Three Oaks, Michigan, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting the village to string electric light wires over the tracks of the M. C. R. R. on west side of Elm street, Three Oaks, Michigan.

12. Dec. 9. To G. R. Hurd, superintendent of the Monroe Electric Light and Power Company, and D. W. Caldwell, president of the Lake Shore & Michigan Southern Railway Company:

Special order permitting light and power company to string electric light wires over the tracks of the L. S. & M. S. Ry. to the Sterling Mills in the city of Monroe, Michigan.

13. Dec. 9. To Charles M. Heald, general manager of the Chicago & West Michigan Railway Company, and Henry Starke, president of the Arcadia & Betsey River Railway Company:

Special order approving interlocking plant at the crossing of the two roads at Henry, Manistee county, Michigan.

14. Dec. 11. To M. E. Liniham, Kalamazoo Fire Department, and D. W. Caldwell, president of the Lake Shore & Michigan Southern Railway Company:

Special order permitting fire department to string fire alarm wires over the tracks of the L. S. & M. S. Ry. on Parson street, Kalamazoo, Michigan.

15. Dec. 14. To F. A. Forbes, general manager of the Michigan Telephone Company, and A. B. Atwater, superintendent of the Detroit, Grand Haven & Milwaukee Railway Company:

Special order permitting telephone company to string wires over the tracks of the D., G. H. & M. Ry. at alley between Scott and Pierce streets, Detroit, Michigan.

16. Dec. 14. To F. A. Forbes, general manager of the Michigan Telephone Company, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting telephone company to string wires over the tracks of the M. C. R. R. at the intersection of Clay street and St. Aubin avenue, Detroit, Michigan.

17. Dec. 21. To F. A. Forbes, general manager of the Michigan Telephone Company, A. B. Atwater, superintendent of the Grand Trunk Railway system, western division, and D. W. Caldwell, president of the Lake Shore & Michigan Southern Railway Company:

Special order permitting telephone company to change poles to north side of Michigan avenue, where wires cross the two railroads, Detroit, Michigan.

18. Dec. 23. To John Strong & Son, South Rockwood, Michigan, and D. W. Caldwell, president of the Lake Shore & Michigan Southern Railway Company:

Special order permitting company to string a telephone wire over the tracks of the L. S. & M. S. Ry. in South Rockwood, Michigan.

19. Dec. 24. To H. B. Ledyard, president of the Michigan Central Railroad Company, D. W. Caldwell, president of the Lake Shore & Michigan Southern Railway Company, C. M. Hays, general manager Grand Trunk Railway Company, and A. B. du Pont, general manager of the Detroit Citizens' Street Railway Company:

Special order approving derailing and signaling appliance at the crossing of the railroads on Grand River avenue, Detroit, Michigan.

20. Dec. 24. To J. H. P. Hughart, general manager of the Grand Rapids & Indiana Railway, and A. B. Atwater, general superintendent of the Toledo, Saginaw & Muskegon Railway Company:

Special order modifying order of approval of interlocking plant at the crossing of the two railroads at Cedar Springs, Michigan.

21. Dec. 30. To Charles M. Hays, general manager of the Grand Trunk Railway Company, and S. T. Crapo, general manager of the Flint & Pere Marquette Railroad Company:

Special order modifying order of approval of interlocking plant at the crossing of the two railroads at Grand Trunk Junction, Michigan.

22. Jan. 2. To Charles M. Heald, receiver of the Detroit, Lansing & Northern Railroad Company, and Charles M. Hays, general manager of the Toledo, Saginaw & Muskegon Railway Company:

Special order modifying order of approval of interlocking plant at the crossing of the two railroads at Greenville, Michigan.

23. Jan. 4. To H. B. Ledyard, president of the Michigan Central Railroad Company; Charles M. Hays, general manager Cincinnati, Saginaw & Mackinaw Railway Company, and I. Bearinger, president of the Inter Urban Railway Company:

Special order approving derailing and signaling device at the crossing of the railroads between Carrollton and Zilwaukee, Michigan.

24. Jan. 4. To the Michigan Central Railroad Company and the Fort Street Depot Company:

Decision in the matter of maintenance of viaduct on River street, Detroit, Michigan.

25. Jan. 6. To F. A. Forbes, general manager Michigan Telephone Company, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting telephone company to string wires over the tracks of the M. C. R. R. on North Church street, Kalamazoo, Michigan.

26. Jan. 6. To F. A. Forbes, general manager of the Michigan Telephone Company, and D. W. Caldwell, president of the Lake Shore & Michigan Southern Railway Company:

Special order permitting telephone company to string wires over the tracks of the L. S. & M. S. Ry. on Farmer street, Otsego, Michigan.

27. Jan. 11. To G. R. Hurd, manager of the Monroe Electric Light and Power Company, and S. T. Crapo, general manager of the Flint & Pere Marquette Railroad Company:

Special order permitting light and power company to string wires over the tracks of the F. & P. M. R. R. on Front street, Monroe, Michigan.

29. Jan. 20. To John H. Tripp, manager Kibbie Telephone Company, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting telephone company to string wires over the tracks of the M. C. R. R. at Kibbie, Michigan.

30. Jan. 21. To F. A. Forbes, general manager of the Michigan Telephone Company, and H. C. Potter, secretary and treasurer of the Chicago, Kalamazoo & Saginaw Railway Company:

Special order permitting telephone company to string wires over the tracks of the C. K. & S. Ry. on East Frank street, Kalamazoo, Michigan.

31. Jan. 21. To H. J. Kinnucan, superintendent of the Postal Telegraph-Cable Company, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting cable company to string wires over the tracks of the M. C. R. R. at Decatur, Michigan.

32. Feb. 2. To J. H. P. Hughart, general manager of the Grand Rapids & Indiana Railway Company, and Charles M. Heald, general manager of the Chicago & West Michigan Railway Company:

Special order for erection of safety gates at the crossing of the two railroads on Sixth street, Grand Rapids, Michigan.

33. Feb. 9. To Thomas Neal, secretary of the Acme White Lead and Color Works, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting Acme works to string electric light wires over the tracks of the M. C. R. R. on St. Aubin avenue, Detroit, Michigan.

34. Feb. 11. To James S. Brailey, manager of the Adrain Telephone Company, and D. W. Caldwell, president of the Lake Shore & Michigan Southern Railway Company:

Special order permitting telephone company to string wires over the tracks of the L. S. & M. S. Ry. at Main, Michigan and Center streets, and alley between Dennis and State streets, Adrian, Michigan.

35. Feb. 17. To F. A. Forbes, general manager of the Michigan Telephone Company, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting telephone company to string wires over the tracks of the M. C. R. R. at Sibley's Crossing, Michigan.

36. Feb. 17. To F. A. Forbes, general manager of the Michigan Telephone Company, and C. M. Heald, general manager of the Chicago & West Michigan Railway Company:

Special order permitting telephone company to string wires over the tracks of the C. & W. M. Ry. at Englishville, Michigan.

37. Feb. 25. To the Cleveland, Cincinnati, Chicago & St. Louis Railway Company, and the St. Joseph Valley Railway Company:

Special order for flagman at Territorial street, Benton Harbor, Michigan.

38. March 9. To W. J. Reed, commissioner of highways, Carp Lake township, Emmet county, and J. H. P. Hughart, general manager of the Grand Rapids & Indiana Railway Company:

Special order with plans and specifications for highway crossing in Carp Lake township over the tracks of the G. R. & I. Ry.

39. March 9. To F. A. Forbes, general manager of the Michigan Telephone Company, and C. M. Heald, general manager of the Detroit, Grand Rapids & Western Railroad Company:

Special order permitting telephone company to string wires over the tracks of the D., G. R. & W. R. R. at Madison and Burton avenues, Grand Rapids, Michigan.

40. March 9. To Chas. E. Bell, proprietor of the Telephone Exchange, and S. T. Crapo, general manager of the Flint & Pere Marquette Railroad Company:

Special order permitting telephone company to string wires over the tracks of the F. & P. M. R. R. at Main, Oak, Fifth and Sixth streets, Evart, Michigan.

41. March 9. To F. A. Forbes, general manager of the Michigan Telephone Company, and H. W. Ashley, general manager of the Ann Arbor Railroad Company:

Special order permitting telephone company to string wires over the tracks of the A. A. R. R. at Cadillac, Hobart, Tustin, Leroy, Ashton and Reed City, Michigan.

42. March 9. To F. A. Forbes, general manager of the Michigan Telephone Company; A. B. Atwater, superintendent of the Grand Trunk Railway system, western division, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting telephone company to set an additional pole for wires on Milwaukee avenue, near Hastings street, Detroit, Michigan.

43. March 16. To A. Bonning, Monroe, Michigan, and D. W. Caldwell, president of the Lake Shore & Michigan Southern Railway Company:

Special order permitting A. Bonning to string a private wire line over the tracks of the L. S. & M. S. Ry. in alley between Monroe and Washington streets, Monroe, Michigan.

44. March 16. To G. R. Hurd, manager of the Monroe Electric Light and Power Company, and D. W. Caldwell, president of the Lake Shore & Michigan Southern Railway Company:

Special order permitting light and power company to string wires over the tracks of the L. S. & M. S. Ry. opposite depot in Monroe, Michigan.

45. March 16. To G. L. Gordon, Hudson, Michigan, and D. W. Caldwell, president of the Lake Shore & Michigan Southern Railway Company:

Special order permitting G. L. Gordon to string wires (private) over the L. S. & M. S. Ry. at Wood street, Hudson, Michigan.

46. March 24. To J. Williams, Jr., secretary of the Adrian Telephone Company, and E. A. Gould, superintendent of the eastern division of the Wabash Railroad Company:

Special order permitting telephone company to string wires over the tracks of the Wabash R. R. at East Maumee street and Treat road, in and near Adrian, Michigan.

47. March 30. To G. R. Hurd, manager Monroe Electric Light & Power Company, and D. W. Caldwell, president of the Lake Shore & Michigan Southern Railway Company:

Special order permitting light and power company to string wires over the tracks of the L. S. & M. S. Ry. to electric light works, Monroe, Michigan.

48. April 7. To J. B. Ware, manager of the Citizens' Telephone Company, and Chas. M. Heald, general manager of the Chicago & West Michigan Railway Company:

Special order permitting telephone company to string wires over the tracks of the C. & W. M. Ry. south of the city limits, Grand Rapids, Michigan.

49. April 3. To F. A. Forbes, general manager of the Michigan Telephone Company, and S. T. Blizzard, superintendent of the Michigan division of the Cleveland, Cincinnati, Chicago & St. Louis Railway Company:

Special order modifying order for stringing wires at intersection of Broadway with the C., C., C. & St. L. Ry., Niles, Michigan.

50. April 3. To F. A. Forbes, general manager of the Michigan Telephone Company, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting telephone company to string wires over the tracks of the M. C. R. R. in the Cleveland Cedar Company's yard, at Delray, Michigan.

51. April 7. To the Union Terminal Association, Detroit, Michigan:

Special order for the stationing and maintaining of a flagman at Military avenue, Detroit, Michigan.

52. April 7. To the Michigan Central Railroad Company:

Special order for the stationing and maintaining of a flagman at Langlois road in the township of Springwells, Michigan.

53. April 7. To the Michigan Central Railroad, Lake Shore & Michigan Southern Railway, and Wabash Railroad Companies:

Special order for the stationing and maintaining of a flagman at Waterman avenue in the township of Springwells, Michigan.

54. April 7. To the Michigan Central Railroad, Lake Shore & Michigan Southern Railway, Grand Trunk Railway, and Wabash Railroad companies:

Special order for the erection, operation and maintenance of an electric alarm bell at Beaubien street, Detroit, Michigan.



55. April 7. To the Michigan Central Railroad, Lake Shore & Michigan Southern Railway, Wabash Railroad, Flint & Pere Marquette Railroad, and Detroit, Grand Rapids & Western Railroad companies:

Special order for the stationing and maintaining of a flagman at Dearborn road, in the township of Springwells, Michigan.

56. April 20. To F. A. Forbes, general manager of the Michigan Telephone Company, and E. A. Gould, superintendent of the eastern division of the Wabash Railroad Company:

Special order permitting telephone company to string wires over the tracks of the Wabash Railroad on Treat road, near city limits, Adrian, Michigan.

57. April 20. To F. A. Forbes, general manager of the Michigan Telephone Company, and J. H. P. Hughart, general manager of the Grand Rapids & Indiana Railway Company:

Special order permitting telephone company to string wires over the tracks of the G. R. & I. Ry. at and near Howard City, Morley and Stanwood, Michigan.

58. April 20. To D. C. Oakes, manager of the Mutual Telephone Company, and A. B. Atwater, superintendent of the Detroit, Grand Haven & Milwaukee Railway Company:

Special order permitting telephone company to string wires over the tracks of the D., G. H. & M. Ry. near depot at Coopersville, Michigan.

59. April 27. To B. F. McReynold, secretary of the board of police and fire commissioners; Chas. M. Heald, general manager of the Detroit, Grand Rapids & Western Railroad Company; J. H. P. Hughart, general manager of the Grand Rapids & Indiana Railway Company, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting police and fire commissioners to string wires over the tracks of the D., G. R. & W. Ry., G. R. & I. Ry. and M. C. R. R. at Second avenue, Grand Rapids, Michigan.

60. May 4. To F. A. Forbes, general manager of the Michigan Telephone Company, and A. B. Atwater, superintendent of the Detroit, Grand Haven & Milwaukee Railway Company:

Special order permitting telephone company to string wires over the tracks of the D., G. H. & M. Ry. near railway depot at Nunica, Michigan.

61. May 17. To F. A. Forbes, general manager of the Michigan Telephone Company, and S. T. Crapo, general manager of the Flint & Pere Marquette Railroad Company:

Special order permitting telephone company to string wires over the M. C. R. R. bridge at Saginaw W. S., Michigan.

62. May 19. To F. A. Forbes, general manager of the Michigan Telephone Company, and D. W. Caldwell, president of the Lake Shore & Michigan Southern Railway Company:

Special order permitting telephone company to string wires over the tracks of the L. S. & M. S. Ry. at Lewis street, Jackson, Michigan.

63. May 19. To Henry Gorton & Son, Waterloo, Michigan, and A. B. Atwater, superintendent of the Grand Trunk Railway system, western division:

Special order permitting telephone company to string wires over the tracks of the G. T. Ry. (Michigan Air Line) at Stockbridge, Michigan.

64. May 19. To Lima Northern Railway Company:

Special order requiring railway company to build right of way fences in Seneca township, Lenawee county, Michigan.

65. May 19. To Michigan Central Railroad Company:

Special order requiring railroad company to station a flagman at Main street crossing of the railroad in Chelsea, Michigan

66. May 19. To Michigan Central Railroad Company:

Special order requiring railroad company to erect an electric alarm bell at Sophia street crossing of the railroad in Wayne, Wayne county, Michigan.

67. May 19. To Michigan Central Railroad Company:

Special order requiring railroad company to station a flagman at Mason street crossing of the railroad in Dearborn, Wayne county, Michigan.

68. May 19. To Owosso & Corunna Traction Company, and Ann Arbor Railroad Company:

Special order modifying order of June 20, 1896, relative to derailing switches at the Corunna road crossing of the two railroads in Owosso, Michigan.

69. May 10. To F. A. Forbes, general manager of the Michigan Telephone Company, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting telephone company to string wires over the tracks of the M. C. R. R. on Elm street, Kalamazoo, and at South End Lumber & Salt Company's yard, Bay City, Michigan.

70. May 19. To Owosso & Corunna Traction Company and Ann Arbor Railroad Company:

Special order approving signaling device at the crossing of the two railroads on Corunna road, Owosso, Michigan.

71. May 20. Saginaw Union Street Railway Company and Michigan Central Railroad Company:

Special order for new crossing frogs at the Genesee avenue crossing of the two railroads, Saginaw, Michigan.

72. May 25. To Chicago & West Michigan Railway Company:

Special order requiring railway company to station a flagman at the Main street crossing of the railroad in Fremont, Michigan.

73. June 1. To M. W. Lott, secretary of the Three Rivers Telephone Company, and D. W. Caldwell, president of the Lake Shore & Michigan Southern Railway Company:

Special order permitting telephone company to string wires over the tracks of the L. S. & M. S. Ry. at various places in Three Rivers, Michigan.

74. June 1. To M. W. Lott, secretary of the Three Rivers Telephone Company, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting telephone company to string wires over the tracks of the M. C. R. R. on Flint avenue, Three Rivers Michigan.

75. June 1. To D. Eldred, general manager of the Eldred Telephone Company, and A. B. Atwater, superintendent of the Grand Trunk Railway system, western division:

Special order permitting telephone company to string wires over the tracks of the G. T. Ry. at Pavilion and near Scott's station, Michigan.

76. June 1. To D. Eldred, general manager of the Eldred Telephone Company, and J. H. P. Hughart, general manager of the Grand Rapids & Indiana Railway Company:

Special order permitting telephone company to string wires over the tracks of the G. R. & I. Ry. at Vicksburg, Michigan.

77. June 3. To Thomas Carmody, secretary of the Watervliet & Paw Paw Lake Telephone Company, and J. K. V. Agnew, general superintendent of the Chicago & West Michigan Railway Company:

Special order permitting telephone company to string wires over the tracks of C. & W. M. Ry. in Watervliet, Michigan.

78. June 3. To M. W. Lott, secretary of the Three Rivers Telephone Company, and D. W. Caldwell, president of the Lake Shore & Michigan Southern Railway Company:

Special order permitting telephone company to string wires over the tracks of the L. S. & M. S. Ry. at Broadway, Three Rivers, Michigan.

79. June 3. To Detroit Telephone Company and Lake Shore & Michigan Southern Railway Company.

Special order permitting telephone company to string wires over the tracks of L. S. & M. S. Ry. at various places in Detroit, Michigan.

80. Detroit Telephone Company and Grand Trunk Railway system, western division:

Special order permitting telephone company to string wires over the tracks of the G. T. Ry. at various places in Detroit, Michigan.

81. June 3. To Detroit Telephone Company and Michigan Central Railroad Company:

Special order permitting telephone company to string wires over the tracks of the M. C. R. R. at various places in Detroit, Michigan.

82. June 3. To Detroit Telephone Company and Wabash Railroad Company:

Special order permitting telephone company to string wires over the tracks of the Wabash Railroad at various places in Detroit, Michigan.

83. June 3. To Chicago & West Michigan Railway Company:

Special order revoking order of September 25, 1891, relative to flagman at Thirteenth street, Holland, Michigan.

84. June 3. To Chicago & West Michigan Railway Company:

Special order for C. & W. M. Ry. to station flagman at the crossing of its tracks with West street, Zeeland, Michigan.

85. June 5. To F. A. Forbes, general manager of the Michigan Telephone Company, and Chas. M. Heald, general manager of the Detroit, Grand Rapids & Western Railroad Company:

Special order permitting telephone company to string wires over the tracks of D., G. R. & W. R. R. at State street, Alma, Michigan.

86. June 5. To Flint & Pere Marquette Railroad Company:

Special order for the erection of an alarm bell at crossing just north of Clyde station, Michigan.

87. June 8. To F. A. Forbes, general manager of the Michigan Telephone Company, and H. W. Ashley, general manager of the Ann Arbor Railroad Company:

Special order permitting telephone company to string wires over the tracks of A. A. R. R. at State street, Alma, Michigan.

88. June 8. To C. H. Roser, general manager of the Detroit & Lima Northern Railway Company, and D. W. Caldwell, president of the Lake Shore & Michigan Southern Railway Company:

Special order permitting D. & L. N. Ry. to string telegraph wires over the tracks of the L. S. & M. S. Ry. at State street, Adrian, Michigan.

89. June 11. To Detroit Telephone Company and Lake Shore & Michigan Southern Railway Company:

Special order permitting telephone company to string wires over the tracks of L. S. & M. S. Ry. at various places in Detroit, Michigan.

90. June 12. To Oakland Railway Company and Grand Trunk Railway system:

Special order with specifications for construction of crossing at the intersection of the railways at Saginaw street, Pontiac, Michigan.

91. June 12. To Detroit, Grand Haven & Milwaukee Railway Company:

Special order for the erection and maintenance of an electric alarm bell at Wesson street crossing, Pontiac, Michigan.

92. June 12. To Fred Waters, commissioner of highways, Beaverton township, Gladwin county, Michigan, and S. T. Crapo, general manager of the Flint & Pere Marquette Railroad Company:

Special order with plans and specifications for highway crossing in the township of Beaverton, county of Gladwin, Michigan.

93. June 15. To Twin City Telephone Company and Cleveland, Cincinnati, Chicago & St. Louis Railway Company:

Special order permitting telephone company to string wires over the tracks of the C., C., C. & St. L. Ry. at various places, Benton Harbor, Michigan.

94. June 22. To Inter Urban Railway Company and Michigan Central Railroad Company:

Special order approving derailing and signaling device at the crossing of the two roads, north of the village of Zilwaukee, county of Saginaw, Michigan.

95. June 23. To C. W. Swaverly, manager of the Swaverly Telephone Company, and Chas. M. Heald, general manager of the Chicago & West Michigan Railway Company:

Special order permitting telephone company to string wires over the tracks of C. & W. M. Ry. at Barker's Creek, Michigan.

96. June 25. To Fred G. Waters, commissioner of highways, Beaverton township, Gladwin county, Michigan, and S. T. Crapo, general manager Flint & Pere Marquette Railroad Company:

Special order with plans and specifications for highway crossing in the township of Beaverton, county of Gladwin, Michigan.

97. June 26. To Twin City Telephone Company and Vandalia Line:

Special order permitting telephone company to string wires over the tracks of the Vandalia Line at Wayne street, St. Joseph, Michigan.

98. June 28. To Michael Speck, commissioner of highways, Beaugrand township, Cheboygan county, Michigan:

Special order with plans and specifications for highway crossing in township of Beaugrand, Cheboygan county, Mich.

99. June 28. To F. A. Forbes, general manager of the Michigan Telephone Company, and Chas. M. Heald, general manager of the Chicago & West Michigan Railway Company:

Special order permitting telephone company to string wires over the tracks of the C. & W. M. Ry. at State road, north of Traverse City, Michigan.

100. June 28. To F. A. Forbes, general manager of the Michigan Telephone Company, and J. H. P. Hughart, general manager of the Grand Rapids & Indiana Railway Company:

Special order permitting telephone company to string wires over the tracks of G. R. & I. Ry. at East Vine street, Kalamazoo, Michigan.

101. July 1. To L. K. Stein, commissioner of highways, township of Blumfield, county of Saginaw, Michigan, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order with plans and specifications for highway crossings in the township of Blumfield, county of Saginaw, Michigan.

102. July 1. To F. A. Forbes, general manager of the Michigan Telephone Company, and H. C. Potter, secretary of the Chicago, Kalamazoo & Saginaw Railway Company:

Special order permitting telephone company to string wires over the tracks of the C., K. & S. Ry. at Walbridge street, Kalamazoo, Michigan.

103. July 1. To Lansing Water Works & Electric Light Board, Michigan Central Railroad Company and Detroit, Grand Rapids & Western Railroad Company:

Special order permitting board to string wires over the tracks of the M. C. R. R. and D., G. R. & W. R. R. on Michigan avenue, Lansing, Michigan.

104. July 3. To People's Telephone Company, Carleton, Michigan, and D. W. Caldwell, president of the Lake Shore & Michigan Southern Railway Company:

Special order permitting telephone company to string wires over the tracks of L. S. & M. S. Ry. at Rockwood, Michigan.

105. July 3. To Detroit Telephone Company and Flint & Pere Marquette Railroad Company:

Special order permitting telephone company to string wires over the tracks of F. & P. M. R. R. at Front street, Monroe, Michigan.

106. July 6. To F. A. Forbes, general manager of the Michigan Telephone Company, and J. H. P. Hughart, general manager of the Grand Rapids & Indiana Railway Company:

Special order permitting telephone company to string wires over the tracks of G. R. & I. Ry. at and near Kingsley, Michigan.

107. July 9. To Ann Arbor Railroad Company:

Special order for railroad company to station and maintain a flagman at the intersection of railroad with Maple and Pine streets, McBain, Michigan.

108. July 9. To the Grand Rapids & Indiana Railway Company and Flint Pere Marquette Railroad Company:

Special order for protection at Slosson avenue and Main street, Reed City, Michigan.

109. July 9. To commissioner of highways township of Plymouth, county of Wayne, Michigan, and Flint & Pere Marquette Railroad Company:

Special order with plans and specifications for highway crossing south of the village of Northville, Michigan.

110. July 9. To F. A. Forbes, general manager of the Michigan Telephone Company, and J. H. P. Hughart, general manager of the Grand Rapids & Indiana Railway Company:

Special order permitting telephone company to string wires over the tracks of the G. R. & I. Ry. at Beaubien street, Petoskey, Michigan.

111. July 14. To T. F. Ahern, general superintendent of the New State Telephone Company, and D. W. Caldwell, president of the Lake Shore & Michigan Southern Railway Company:

Special order permitting telephone company to string wires over the tracks of the L. S. & M. S. Ry. at Huron street, Ypsilanti, Michigan.

112. July 17. To Twin City Telephone Company and Charles M. Heald, general manager of the Chicago & West Michigan Railway Company:

Special order permitting telephone company to string wires over the tracks of the C. & W. M. Ry. at various places in the State of Michigan.

113. July 20. To A. A. Patterson, Jr., president of the St. Joseph Valley Railway Company:

Special order authorizing the railway company to resume operation and transportation of passengers over its lines.

114. July 19. To F. T. Bisbee & Co., Athens, Michigan, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting telephone company to string wires over the tracks of the M. C. R. R. on highway at Clarendon, Michigan.

115. July 21. To Twin City Telephone Company and Charles M. Heald, general manager of the Chicago & West Michigan Railway Company:

Special order permitting telephone company to string wires over the tracks of the C. & W. M. Ry. at various places in the State of Michigan.

116. July 24. To Twin City Telephone Company and S. T. Blizard, superintendent of the Cleveland, Cincinnati, Chicago & St. Louis Railway Company:

Special order permitting telephone company to string wires over the tracks of the C., C., C. & St. L. Ry. at Empire avenue, near city limits of Benton Harbor, Michigan.

117. July 24. To H. W. Carey, assistant general manager of the Manistee & Luther Railroad Company, and Charles M. Heald, general manager of the Chicago & West Michigan Railway Company:

Special order permitting M. & L. R. R. Co. to string wires over the tracks of the C. & W. M. Ry. at Florence, near Doubling, Manistee county, Michigan.

118. July 24. To H. C. Mason, superintendent Electric Light Company, Benton Harbor, Michigan, and S. T. Blizard, superintendent of the Cleveland, Cincinnati, Chicago & St. Louis Railway Company:

Special order permitting electric light company to string wires over the tracks of the C., C., C. & St. L. Ry. near depot at Benton Harbor, Michigan.

119. August 2. To R. D. White, Williamsburg, Michigan, and Charles M. Heald, general manager of the Chicago & West Michigan Railway Company:

Special order permitting R. D. White to string wires over the tracks of the C. & W. M. Ry. east of depot in Williamsburg, Michigan.

120. August 4. To F. A. Forbes, general manager of the Michigan Telephone Company, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting telephone company to string wires over the tracks of the M. C. R. R. on Main street, in Galien, Michigan.

121. August 5. To Lake Shore & Michigan Southern Railway Company:

Special order for railroad company to station and maintain a flagman at West street crossing, Hillsdale, Michigan.

122. August 9. To T. F. Ahern, general superintendent of the New State Telephone Company, and W. H. Canniff, general manager of the Lake Shore & Michigan Southern Railway Company:

Special order permitting telephone company to string wires over the tracks of the L. S. & M. S. Ry. near Wyandotte, Michigan.

123. August 10. To Charles E. Kane, commissioner of highways, township of Martiney, Mecosta county, Michigan, and Charles M. Heald, general manager of the Detroit, Grand Rapids & Western Railroad Company:

Special order with plans and specifications for highway crossing in Martiney township, Mecosta county, Michigan.

124. August 11. To Detroit, Grand Haven & Milwaukee Railway Company:

Special order for railway company to station and maintain a flagman at LaFayette street, and an electric bell at Clancy street, Grand Rapids, Michigan.

125. August 11. To Detroit, Grand Rapids & Western Railroad Company and Detroit, Grand Haven & Milwaukee Railway Company:

Special order for railroad companies to station and maintain a flagman at Steel street crossing, Ionia, Michigan.

126. August 12. To Wm. McGregor, Jr., Birch Run, Michigan, and S. T. Crapo, general manager of the Flint & Pere Marquette Railroad Company:

Special order permitting Wm. McGregor, Jr., to string one wire over the tracks of the F. & P. M. R. R. at Birch Run, Michigan.

127. August 12. To Twin City Telephone Company and Milwaukee, Benton Harbor & Columbus Railway Company:

Special order permitting telephone company to string wires over the tracks of the M., B. H. & C. Ry. on Empire avenue, Benton Harbor, Michigan.

128. August 17. To W. H. Gilbert, managing director of the Valley Telephone Company, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting telephone company to string wires over the tracks of the M. C. R. R. at various places in the State of Michigan.

129. August 17. To W. H. Gilbert, managing director of the Valley Telephone Company, and A. B. Atwater, superintendent of the Cincinnati, Saginaw & Mackinaw Railway Company:

Special order permitting telephone company to string wires over the tracks of the C., S. & M. Ry. at Salzburg and Saginaw, Michigan.

130. August 17. To W. H. Gilbert, managing director of the Valley Telephone Company, and S. T. Crapo, general manager of the Flint & Pere Marquette Railroad Company:

Special order permitting telephone company to string wires over the tracks of the F. & P. M. R. R. at various places in the State of Michigan.

131. August 24. To Saugatuck & Ganges Telephone Company (limited) and Charles M. Heald, general manager of the Chicago & West Michigan Railway Company:

Special order permitting telephone company to string wires over the tracks of the C. & W. M. Ry. at Fennville, Michigan.

132. August 26. To M. A. Porter, secretary of the Northville Telephone Company, and S. T. Crapo, general manager of the Flint & Pere Marquette Railroad Company:

Special order permitting telephone company to string wires over the tracks of the F. & P. M. R. R. near Novi, Michigan.

133. August 26. To D. C. Oakes, manager of the Mutual Telephone Company, and Charles M. Heald, general manager of the Chicago & West Michigan Railway Company:

Special order permitting telephone company to string wires over the tracks of the C. & W. M. Ry. at Washington and Seventh streets, Grand Haven, Michigan.

134. August 28. To J. H. Tripp, manager of the Kibbie Telephone Company, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting telephone company to string wire over the tracks of the M. C. R. R. one mile west of Grand Junction, Michigan.

135. August 28. To Chicago & West Michigan Railway Company and Manistee & Luther Railroad Company:

Special order approving interlocking device at the crossing of the two railroads at Florence, Michigan.

136. September 2. To Cleveland, Cincinnati, Chicago & St. Louis Railway Company:

Special order for repairing and reconstruction of right of way fence along the line of said railway in the State of Michigan.

137. September 2. To Toledo, Ann Arbor & North Michigan Railway Company:

Special order for railway to repair interlocking device at its crossing with the F. & P. M. R. R. at Clare, Michigan.

138. September 2. To Indiana & Lake Michigan Railway Company:

Special order for railway company to fence right of way through the property of James LaMunion, in Berrien county, Michigan.

139. September 2. To George W. Finch, owner of the Finch Telephone Exchange, and John M. Whitman, general manager of the Chicago & North Western Railway Company:

Special order permitting telephone company to string wires over the tracks of the C. & N. W. Ry. at various places in the State of Michigan.

140. September 3. To Berridge & Berridge, Orion, Michigan, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting said firm to string wire over the tracks of the M. C. R. R. near depot, Orion, Michigan.

141. September 9. To the Valley Telephone Company and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting telephone company to string wires over the tracks of the M. C. R. R. on Fremont avenue, between First and Second streets, West Bay City, Michigan.



142. September 9. To the Valley Telephone Company and A. B. Atwater, superintendent of the Cincinnati, Saginaw & Mackinaw Railroad Company:

Special order permitting telephone company to string wires over the tracks of the C., S. & M. R. R. at various crossings in the city of West Bay City, Michigan.

143. September 9. To F. A. Forbes, general manager of the Michigan Telephone Company, and S. R. Callaway, president of the Lake Shore & Michigan Southern Railway Company:

Special order permitting telephone company to string wires over the tracks of the L. S. & M. S. Ry. in Tecumseh, Michigan.

144. September 11. To Charles C. Cutting, Steward of Michigan Asylum for the Insane, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting the stringing of an electric light wire over the tracks of the M. C. R. R. near Asylum, Kalamazoo, Michigan.

145. September 14. To New State Telephone Company and S. T. Crapo, general manager of the Flint & Pere Marquette Railroad Company:

Special order permitting telephone company to string wires over the tracks of the F. & P. M. R. R. at Gardendale, Aitkins and Croswell, Michigan.

146. September 14. To New State Telephone Company and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting telephone company to string wires over the tracks of the M. C. R. R. at various places in the State of Michigan.

147. September 14. To New State Telephone Company and A. B. Atwater, superintendent of the Grand Trunk Railway Company:

Special order permitting telephone company to string wires over the tracks of the G. T. Ry. at South Lyon, Oakland county, Michigan.

148. September 14. To New State Telephone Company and E. A. Gould, superintendent of the eastern division of the Wabash Railroad Company:

Special order permitting telephone company to string wires over the tracks of the Wabash R. R. in Springwells, Michigan.

149. September 14. To New State Telephone Company and S. R. Callaway, president of the Lake Shore & Michigan Southern Railway Company:

Special order permitting telephone company to string wires over the tracks of L. S. & M. S. Ry. at Rockwell and Ecorse, Michigan.

150. September 24. To South Haven & Eastern Railroad Company:

Special order for railroad company to build right of way fence through the property of H. D. Van Camp, Hartford township, VanBuren county, Michigan.

151. September 25. To Berlamont Telephone Company and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting telephone company to string wires over the tracks of the M. C. R. R. near Berlamont and Bloomingdale, Michigan.

152. September 27. To the Valley Telephone Company and A. B. Atwater, superintendent of the Cincinnati, Saginaw & Mackinaw Railroad Company:

Special order permitting telephone company to string wires over the tracks of C., S. & M. R. R. at various places in West Bay City, Michigan.

153. September 27. To the Valley Telephone Company and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting telephone company to string wires over the tracks of the M. C. R. R. at First street, West Bay City, Michigan.

154. September 28. To F. A. Forbes, general manager of the Michigan Telephone Company, and A. B. Atwater, superintendent of the Grand Trunk Railway, western division:

Special order permitting telephone company to string wires over the tracks of the G. T. Ry. at Bennington and Grosse Isle, Michigan.

155. September 30. To New State Telephone Company and Charles M. Heald, general manager of the Detroit, Grand Rapids & Western Railroad Company:

Special order permitting telephone company to string wires over the tracks of the D., G. R. & W. R. R. at Salem, Green Oak and South Lyon, Michigan.

156. October 4. To F. A. Forbes, general manager of the Michigan Telephone Company, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting telephone company to string wires over the tracks of the M. C. R. R. at Elm street, Three Oaks, Michigan.

157. October 4. To New State Telephone Company and S. T. Crapo, general manager of the Flint & Pere Marquette Railroad Company:

Special order permitting telephone company to string wires over the tracks of the F. & P. M. R. R. near and south of Holly, Michigan:

158. October 4. To F. A. Forbes, general manager of the Michigan Telephone Company, and S. R. Callaway, president of the Lake Shore & Michigan Southern Railway Company:

Special order permitting telephone company to string wires over the tracks of the L. S. & M. S. Ry. on Welch street, Hillsdale, Michigan.

159. October 5. To Peter Cody, commissioner of highways, township of Pinconning, county of Bay, Michigan, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order with plans and specifications for highway crossing in township of Pinconning, county of Bay, Michigan.

160. October 5. To Michigan Central Railroad Company:

Special order for erection and maintenance of electric alarm bell east of Jones, Newberry township, Cass county, Michigan.

161. October 6. To New State Telephone Company and A. B. Atwater, superintendent of the Grand Trunk Railway, western division:

Special order permitting telephone company to string wires over the tracks of the G. T. Ry. near Amy and Rochester, Michigan.

162. October 6. To New State Telephone Company and H. W. Ashley, general manager of the Ann Arbor Railroad Company:

Special order permitting telephone company to string wires over the tracks of the A. A. R. R. one-half mile north of Monroe Junction, Michigan.

163. October 7. To W. J. Jennings, commissioner of highways, township of Wise, county of Isabella, Michigan, and S. T. Crapo, general manager of the Flint & Pere Marquette Railroad Company:

Special order with plans and specifications for highway crossing in township of Wise, county of Isabella, Michigan.

164. October 8. To Detroit Telephone Company:

Special order for the removal of unlawfully strung wires at the intersection of the Michigan Central Railroad Company's tracks and Hastings street, Detroit, Michigan.

165. October 8. To Duluth, South Shore & Atlantic Railway Company and Chicago & North Western Railway Company:

Special order requiring targets to be placed at the crossing of the two roads one-half mile west of Negaunee, Michigan.

166. October 8. To Duluth, South Shore & Atlantic Railway Company:

Special order requiring construction of depot and warehouse at Michigamme, Michigan.

167. October 8. To Duluth, South Shore & Atlantic Railway Company:

Special order requiring construction of depot and warehouse at Munising Junction, Michigan.

168. To Duluth, South Shore & Atlantic Railway Company:

Special order requiring construction of depot and warehouse at Seney, Michigan.

169. To Ann Arbor Railroad Company:

Special order for the repair and operation of interlocking plant at crossing of A. A. R. R. and F. & P. M. R. R. at Clare, Michigan.

170. October 9. To Duluth, South Shore & Atlantic Railway Company:

Special order for the repairing and rebuilding of bridge No. 157 west of Munising Junction, county of Alger, Michigan.

171. October 9. To Duluth, South Shore & Atlantic Railway Company:

Special order for the repairing and rebuilding of bridge No. 158 west of Munising Junction, county of Alger, Michigan.

172. October 9. To Duluth, South Shore & Atlantic Railway Company:

Special order for the repairing and rebuilding of bridge No. 10, one and one-half miles east of Eckerman, county of Chippewa, Michigan.

173. October 9. To Duluth, South Shore & Atlantic Railway Company:

Special order for the repairing and rebuilding of bridge No. 174, east of Deerton, county of Alger, Michigan.

174. October 11. To Ira Hutchins, proprietor of Fennville Electric Light Works, and Charles M. Heald, general manager of the Chicago & West Michigan Railway Company:

Special order permitting electric company to string wires north of depot in Fennville, Michigan.

175. October 11. To New State Telephone Company and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting telephone company to string wires over the tracks of the M. C. R. R. at various places in the State of Michigan.

176. October 11. To New State Telephone Company and A. B. Atwater, superintendent of the Grand Trunk Railway, western division:

Special order permitting telephone company to string wires over the tracks of the G. T. Ry. at various places in the State of Michigan.

177. October 11. To F. A. Forbes, general manager of the Michigan Telephone Company, and J. H. P. Hughart, general manager of the Grand Rapids & Indiana Railway Company:

Special order permitting telephone company to string wires over the tracks of the G. R. & I. Ry. at various places in the State of Michigan.

178. October 12. To Lake Shore & Michigan Southern Railway Company, Michigan Central Railroad Company and Wabash Railroad Company:

Special order for the L. S. & M. S. Ry., M. C. R. R. and W. R. R. to station and maintain a flagman at the intersection of Hastings street with the tracks of said companies, in the city of Detroit, Michigan.

179. October 18. To New State Telephone Company and Grand Trunk Railway system, western division:

Special order permitting telephone company to string wires over the tracks of G. T. Ry. at Owosso, Perry and one mile east of Perry, Michigan.

180. October 18. To F. A. Forbes, general manager of the Michigan Telephone Company, and F. B. Drake, general manager of the Cincinnati Northern Railroad Company:

Special order permitting telephone company to string wires over the tracks of the C. N. R. R. one mile north of Waldron, and five miles north of Prattsville, Michigan.

181. October 18. To New State Telephone Company and Lake Shore & Michigan Southern Railway Company:

Special order permitting telephone company to string wires over the tracks of the L. S. & M. S. Ry. at various places in the State of Michigan.

182. October 19. To New State Telephone Company and Michigan Central Railroad Company:

Special order permitting telephone company to string wires over M. C. R. R. on Fort street, Toledo division, Detroit, Michigan.

183. October 21. To West Michigan Telephone Company and Lake Shore & Michigan Southern Railway Company:

Special order permitting telephone company to string wires over the tracks of the L. S. & M. S. Ry. at Hopkins Station, Michigan.

184. October 21. To F. A. Forbes, general manager of the Michigan Telephone Company, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting telephone company to string one wire over the tracks of M. C. R. R. at Lawnsdale avenue, Detroit, Michigan.

185. October 21. To F. A. Forbes, general manager of the Michigan Telephone Company, and S. R. Callaway, president of the Lake Shore & Michigan Southern Railway Company:

Special order permitting telephone company to string one telephone wire over the tracks of the L. S. & M. S. Ry. at Lawnsdale avenue, Detroit, and on highway next east of Cadmus Station, Michigan.

186. October 21. To F. A. Forbes, general manager of the Michigan Telephone Company, and A. B. Atwater, superintendent of the Grand Trunk Railway system, western division:

Special order permitting telephone company to string one telephone wire over the tracks of the G. T. Ry. one mile north of station at Mt. Clemens, Michigan.

187. October 21. To F. A. Forbes, general manager of the Michigan Telephone Company, and E. A. Gould, superintendent of eastern division of the Wabash Railroad Company:

Special order permitting telephone company to string one telephone wire over the tracks of Wabash R. R. at Lawnsdale avenue, Detroit, Michigan.

188. October 22. To Flint & Pere Marquette Railroad Company and Manistee & North-Eastern Railroad Company:

Special order for renewal of interlocking plant at the intersection of the tracks of the two railroads at Manistee, Michigan.

189. October 26. To Tecumseh Telephone Company and Lake Shore & Michigan Southern Railway Company:

Special order permitting telephone company to string wires over the tracks of the L. S. & M. S. Ry. at various places in the village of Tecumseh, Michigan.

190. October 26. To Tecumseh Telephone Company and Detroit, Toledo & Milwaukee Railroad Company:

Special order permitting telephone company to string wires over the tracks of the D., T. & M. R. R. at various places in Tecumseh, Michigan.

191. October 26. To John H. Tripp, manager of the Kibbie Telephone Company, and Charles M. Heald, general manager of the Chicago & West Michigan Railway Company:

Special order permitting telephone company to string one telephone wire over the tracks of the C. & W. M. Ry. on highway north of depot at Grand Junction, Michigan.

192. October 27. To Fennville Electric Light Works and Chicago & West Michigan Railway Company:

Special order permitting telephone company to string one electric light wire over the tracks of the C. & W. M. Ry. on highway north of depot at Fennville, Michigan.

193. October 27. To Benton Harbor & Eastman Springs Street Railway Company, Cleveland, Cincinnati, Chicago & St. Louis Railway Company, and Milwaukee, Benton Harbor & Columbus Railway Company:

Special order approving street railway company's crossing of the tracks of C., C. & St. L. Ry. and M., B. H. & C. Ry. on Main street, Benton Harbor, Michigan, and providing for installation, operation and maintenance of derailing system.

194. October 28. To Detroit Telephone Company and Michigan Central Railroad Company:

Special order permitting telephone company to string wires over the tracks of the M. C. R. R. at various places in Detroit, Michigan.

195. October 30. To F. A. Forbes, general manager of the Michigan Telephone Company, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting telephone company to string two wires over the tracks of the M. C. R. R. near freight house, Bay City, Michigan.

196. October 30. To the Valley Telephone Company and Michigan Central Railroad Company:

Special order permitting telephone company to string telephone wires over the tracks of the M. C. R. R. at various places in West Bay City, Michigan.

197. October 30. To F. A. Forbes, general manager of the Michigan Telephone Company, and A. B. Atwater, superintendent of the Grand Trunk Railway system, western division:

Special order permitting telephone company to string two wires over the tracks of the G. T. Ry. on first street east of Bancroft station, Michigan.

198. October 30. To the Valley Telephone Company and Grand Trunk Railway system, western division:

Special order permitting telephone company to string wires over the tracks of the G. T. Ry. at Main street, West Bay City, Michigan.

199. November 1. To Monroe Gas & Electric Light Company and Lake Shore & Michigan Southern Railway Company:

Special order permitting gas and electric light company to string two electric light wires between Harrison and Cass streets in Monroe, Michigan.

200. November 2. To Lake Shore & Michigan Southern Railway Company and Detroit & Lima Northern Railway Company:

Special order approving interlocking switch and signal system at the crossing of the two railways in Adrian, Michigan.

201. November 3. To C. Corbett, district superintendent of the Western Union Telegraph Company, and S. R. Callaway, president of the Lake Shore & Michigan Southern Railway Company:

Special order permitting W. U. T. company to string wires over the L. S. & M. S. Ry. between Alexis and Delray, Michigan.

202. November 3. To Detroit Telephone Company and Michigan Central Railroad Company:

Special order permitting telephone company to string wires over the M. C. R. R. at various places in Detroit, Michigan.

204. November 5. To Detroit Telephone Company and Lake Shore & Michigan Southern Railway Company.

Special order permitting telephone company to string wires over the tracks of the L. S. & M. S. Ry. at various places in Detroit, Michigan.

205. November 6. To James E. Tryon, general manager of the Michigan Auxiliary Fire Alarm Company, and A. B. Atwater, superintendent of the Grand Trunk Railway system, western division:

Special order permitting fire alarm company to string one wire over the G. T. Ry. in Detroit, Michigan.

206. November 6. To James E. Tryon, general manager of the Michigan Auxiliary Fire Alarm Company, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting fire alarm company to string one wire over the tracks of the M. C. R. R. at Clay avenue, Detroit, Michigan.

207. November 6. To F. A. Forbes, general manager of the Michigan Telephone Company, and J. H. P. Hughart, general manager of the Grand Rapids & Indiana Railway Company:

Special order permitting telephone company to string wires over the tracks of the G. R. & I. Ry. at various places in the State of Michigan.

208. November 6. To F. A. Forbes, general manager of the Michigan Telephone Company, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting telephone company to string two wires over the tracks of the M. C. R. R. at Scotten avenue, Detroit, Michigan.

209. November 6. To F. A. Forbes, general manager of the Michigan Telephone Company, and A. B. Atwater, superintendent of the Grand Trunk Railway system, western division:

Special order permitting telephone company to string two wires over the G. T. Ry. at Vine street, Vicksburg, Michigan.

210. November 6. F. A. Forbes, general manager of the Michigan Telephone Company, and E. H. Canniff, general manager of the Lake Shore & Michigan Southern Railway Company:

Special order permitting telephone company to string two wires over the tracks of the L. S. & M. S. Ry. at Kalamazoo avenue, Kalamazoo, Michigan.

211. November 8. To Detroit Telephone Company and Grand Trunk Railway system, western division:

Special order permitting telephone company to string wires over the tracks of the L. S. & M. S. Ry. at Hastings street and Cass avenue, Detroit, Michigan.

212. November 8. To Detroit Telephone Company and Grand Trunk Railway system, western division:

Special order permitting telephone company to string wires over the tracks of the G. T. Ry. at various places in Detroit, Michigan.

213. November 8. To John H. Tripp, manager of the Kibbie Telephone Company, and Chas. M. Heald, general manager of the Chicago & West Michigan Railway Company:

Special order permitting telephone company to string one wire over the tracks of the C. & W. M. Ry., near Monroe street, Bangor, Michigan.

214. November 9. To Northwestern Ohio Telephone Company and Lake Shore & Michigan Southern Railway Company:

Special order permitting telephone company to string one wire over the tracks of the L. S. & M. S. Ry. at Jasper, Michigan.

215. November 9. To Northwestern Ohio Telephone Company and Wabash Railroad Company:

Special order permitting telephone company to string wires over the tracks of the Wabash Railroad three miles south of Adrian, Michigan.

216. November 12. To Nathan Lefler, commissioner of highways, Gibson township, Bay county, Michigan, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order with plans and specifications for highway crossing in Gibson township, Bay county, Michigan.

217. November 12. To New State Telephone Company & Ann Arbor Railroad Company.

Special order permitting telephone company to string wires over the tracks of the A. A. R. R. at Grand River wagon road, three-quarters mile east of Howell, Michigan.

218. November 16. To Flint & Pere Marquette Railroad Company:

Special order for railroad company to station and maintain a flagman at Main street crossing in the village of Plymouth, Michigan.

219. November 16. To Montcalm County Telephone Association and Chas. M. Heald, general manager of the Chicago & West Michigan Railway Company:

Special order permitting telephone company to string wires over the tracks of the C. & W. M. Ry. at various places in the State of Michigan.

220. November 16. To Montcalm County Telephone Association and A. B. Atwater, superintendent of the Grand Trunk Railway system, western division:

Special order permitting telephone company to string wires over the tracks of the G. T. Ry. four miles west of Sheridan, Michigan.

221. November 16. To Andrew Wallin, commissioner of highways, Mellen township, Menominee county, Michigan, and J. A. Whitman, general manager of the Chicago & Northwestern Railway Company:

Special order with plans and specifications for highway crossing in Mellen township, Menominee county, Michigan.

222. November 17. To the city of West Bay City and Grand Trunk Railway system, western division:

Special order permitting said city to string electric light wires over the tracks of the G. T. Ry. in West Bay City, Michigan.

223. November 17. To the city of West Bay City and Michigan Central Railroad Company:

Special order permitting said city to string electric light wires over the tracks of the M. C. R. R. at various places in West Bay City, Michigan.

224. November 18. To F. A. Forbes, general manager of the Michigan Telephone Company, and A. B. Atwater, superintendent of the Grand Trunk Railway system, western division:

Special order permitting telephone company to string two wires over the tracks of the G. T. Ry. at first street east of station at Attica, Michigan.

225. November 18. To F. A. Forbes, general manager of the Michigan Telephone Company, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting telephone company to string two wires over the tracks of the M. C. R. R. west of depot at Dayton, Michigan.

226. November 20. To Pontiac, Oxford & Northern Railroad Company:

Special order for repairs and renewals to be made in track and bridge structures of said railroad within thirty days.

227. November 24. To New State Telephone Company and Lake Shore & Michigan Southern Railway Company:

Special order permitting telephone company to string four wires over the tracks of the L. S. & M. S. Ry. in Maybee, Michigan.

228. November 26. To F. A. Forbes, general manager of the Michigan Telephone Company, and M. V. Meredith, general manager of the South Haven & Eastern Railroad Company:

Special order permitting telephone company to string wires over the tracks of the S. H. & E. R. R. at various places in the State of Michigan.

229. November 26. To F. A. Forbes general manager of the Michigan Telephone Company, and E. A. Gould, superintendent of eastern division of Wabash Railroad Company:



Special order permitting telephone company to string wires over the tracks of Wabash R. R. at Leonard street, Detroit, Michigan.

230. November 26. To F. A. Forbes, general manager of the Michigan Telephone Company, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting telephone company to string two wires over the tracks of M. C. R. R. at Nepsing street, in Lapeer, Michigan.

231. November 26. To F. A. Forbes, general manager of the Michigan Telephone Company, and Chas. M. Heald, general manager of the Chicago & West Michigan Railway Company:

Special order permitting telephone company to string wires over the tracks of C. & W. M. Ry. two miles north of Hartford, Michigan.

232. November 26. To J. Williams, Jr., secretary of the Adrian Telephone Company, and J. R. Megrue, general manager of the Detroit & Lima Northern Railway Company:

Special order permitting telephone company to string wires over the tracks of D. & L. N. Ry. two miles north of Adrian, Michigan.

233. November 26. To New State Telephone Company and Michigan Central Railroad Company:

Special order permitting telephone company to string two wires over the tracks of M. C. R. R. on Lynn street, Owosso, Michigan.

234. November 29. To F. A. Forbes, general manager of the Michigan Telephone Company, and S. T. Crapo, general manager of the Flint & Pere Marquette Railroad Company:

Special order permitting telephone company to string two wires over the tracks of F. & P. M. R. R. on Caroline street, Milford, Michigan.

235. November 30. To James E. Tyron, general manager of the Michigan Auxiliary Fire Alarm Company, and E. A. Gould, superintendent of eastern division of the Wabash Railroad Company:

Special order permitting fire alarm company to string one wire over the tracks of Wabash R. R. at Grand River avenue, Detroit, Michigan.

236. November 30. To James E. Tyron, general manager of the Michigan Auxiliary Fire Alarm Company, and H. B. Ledyard, president of the Michigan Central Railroad Company:

Special order permitting the fire alarm company to string one wire over the tracks of the M. C. R. R. at Grand River avenue, Detroit, Michigan.

237. November 30. To James E. Tryon, general manager of the Michigan Auxiliary Fire Alarm Company, and W. H. Canniff, general manager of the Lake Shore & Michigan Southern Railway Company:

Special order permitting fire alarm company to string one wire over the tracks of the L. S. & M. S. Ry. at Grand River avenue, Detroit, Michigan.

238. November 30. To James E. Tyron, general manager of the Michigan Auxiliary Fire Alarm Company, and A. B. Atwater, superintendent of the Grand Trunk Railway system, western division:

Special order permitting fire alarm company to string one wire over the tracks of G. T. Ry. at Grand River avenue, Detroit, Michigan.

## WIRE INSPECTIONS—1896.

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The provisions of act No. 171 of the session laws of 1893, makes it unlawful for any corporation or person to string any wire, electric or other, over the tracks of any railroad company, except at such places and in such manner as shall be approved by the Commissioner of Railroads. It also makes it incumbent upon any corporation desiring so to string any wire, to give to the railroad company ten days notice in writing of the place where and the manner in which it desires to string the same, and the place where and the time when it will apply to the Commissioner of Railroads for his approval. Section 6 of the same act makes it the duty of the Commissioner of Railroads to inspect all points where the tracks of the railroad companies are crossed by wires, and to order the same raised and such other change or changes to be made as he may deem necessary for protection against accident. This act also requires all wires strung over the railroad companies tracks to be at least twenty-two feet above the railroad grade.

During the past year many applications have been made to string wires over the tracks of railroad companies, and in each instance, when permission has been granted, an order has been made with specifications attached setting forth the manner in which the wire must be strung, the kind of material used, the length of the poles, the number of cross-arms on each pole, number of wires on each cross-arm, the kind of pins required, the height of the wires above the railroad grade, and such further and other requirements as the peculiar nature of the location demands, in order to secure the greatest possible safety to the public.

A careful and thorough inspection has been made of the places where telegraph, telephone, trolley and electric light wires are strung over the tracks of the railroad companies, and while some have been found in an unsafe condition and not in conformity with the provisions of the statute, yet in almost every instance, as soon as the corporation owning the wires has been notified of the defect, a hearty and speedy compliance with the requirements of the statute has been the result.

### BATTLE CREEK.

The trolley wires of the Battle Creek Street Railway were found to be less than the statutory height above the railroad track at the following points:

At the M. C. R. R. crossing on Maple street, 21 feet and 5 inches.

At the G. T. Ry. crossing on Marshall street, 21 feet and 7 inches.

At the G. T. Ry. crossing on South Jefferson street, 21 feet and 9 inches.

At the D., T. & M. R. R. crossing on South Jefferson street, 21 feet and 9 inches.

At the G. T. Ry. crossing on Kendall street, 20 feet and 9 inches.

#### FIRE ALARM WIRES.

The fire alarm wires over the M. C. R. R. crossing on Maple street are on single cross-arms, with telephone wires on brackets on the same poles, which are 100 feet apart.

#### ELECTRIC LIGHT WIRES.

Battle Creek Electric Light Company's wires at the M. C. crossing on Marshall street are attached to a board nailed to a pole and the cross-arms nailed to the board.

#### TELEPHONE AND TELEGRAPH WIRES.

The Michigan Telephone Company's wires over the G. T. Ry. track at the east end of the bridge, two blocks east of depot, are attached to a small board fastened to the railway signal post. The private telephone wire over the G. T. tracks at the east end of Main street is improperly constructed.

The Battle Creek Electric Light Co., the Citizen Electric Light Co., and the Michigan Telephone Company, do not use steel pins nor double cross-arms, and all poles are more than the statutory distance apart.

#### BAY CITY.

The trolleys of the Bay City Consolidated Street Ry. Co. at the following points are not the proper height above the railroad tracks:

At the M. C. crossing on Broadway and 27th streets, 20 feet, 4 inches.

At the F. & P. M. crossing on 34th street, 20 feet, 2 inches.

At the F. & P. M. crossing on 1st street, 19 feet, 10 inches.

At the F. & P. M. crossing on Central avenue, 20 feet 8 inches.

At the F. & P. M. crossing on Columbia avenue, 21 feet, 11 inches.

At the F. & P. M. crossing on 34th street, 20 feet, 2 inches.

At the F. & P. M. siding on Atlantic street, 21 feet, 7 inches.

#### ELECTRIC WIRES.

The Detroit Mill Company's wires over the F. & P. M. and D. & M. Railroads are on small sawed poles nailed to building, and short posts set in ground.

The Eddy Sheldon Company's wires over the F. & P. M. and D., G. H. & M. Railroads are strung on small single cross-arms and brackets.

The Bay City Electric Company's wires over the F. & P. M. and D., G. H. & M. crossing, near McEwan Bros. & Company's factory; at M. C. tracks near Emer, Kann & Company's mill; at M. C. crossings on Park, Garfield, Van Buren & Madison streets and Madison avenue; and at the F. & P. M. crossings on 3d, 5th, 9th, 13th and 16th streets, are all on single cross-arms and brackets nailed to top of the poles.

#### TELEPHONE AND TELEGRAPH WIRES.

The W. U. Telegraph wires at the M. C. crossing near the Bay county fair grounds are on single cross-arms.

The Michigan Telephone Company's wires at D., G. H. & M. crossing, north of M. C.; at water works crossing; at McEwen Bros. and Co. crossing of the F. & P. M.; at F. & P. M. belt line crossing; at Jefferson street and Columbia crossing of the F. & P. M.; and at M. C. crossings on Lafayette and South avenues, are all on single cross-arms. Same company's wires at the M. C. crossings on Madison street and Washington avenue, and the F. & P. M. crossing on First street, are strung on brackets.

The fire alarm wires at M. C. crossings on Jefferson street and Lafayette avenue are on small boards and brackets.

#### BAY CITY (WEST SIDE).

The West Bay City Electric Company's wires at the M. C. round house; at M. C. crossing on Mount street, and also Ross Bradley Company's crossing of the C., S. & M. are strung on brackets.

The fire alarm wires near M. C. roundhouse; at crossing four blocks north of Washington street, and at C., S. & M. crossings on Mount, 4th, Walnut and Hart streets, are fastened on brackets.

The W. U. Telegraph wires at C., S. & M. crossing on Washington street, on brackets.

The Michigan Telephone Company's wires at M. C. crossings on Midland, Switzer, Eastwood, State, and near roundhouse, are on brackets.

#### BENTON HARBOR AND ST. JOSEPH.

Michigan Telephone Company, at all railroad crossings, use single cross-arms and wooden pins.

The Benton Harbor & St. Joseph Railway Company's electric light wires are on single cross-arms and brackets at all railroad crossings.

#### DETROIT.

The trolley wires at the following crossings are defective:

At the G. T. crossing on Champlain street, 21 feet 7 inches above rail.

At the G. T. crossing on Forest street, 21 feet 8 inches above rail.

At M. C. Belt Line crossing on Kercheval street, 21 feet 3 inches above rail.

At M. C. Belt Line crossing on Champlain street, 21 feet 4 inches above rail.

At D., G. R. & W. crossing on Michigan avenue, 20 feet 7 inches above rail.

At M. C. crossing on Fort street, 21 feet 6 inches above rail.

At M. C. crossing on River street, 21 feet 10 inches above rail.

At L. S. & M. S. crossing on Fort street, 21 feet 6 inches above rail.

At Union Depot Co. track crossing, west of depot, 21 feet 5 inches above rail.

At East River track on River street, 20 feet 2 inches above rail.

At Union Depot Co.'s tracks on River street, 20 feet 2 inches above rail.

#### ELECTRIC LIGHT WIRES.

The Detroit Electric Light Company's wires over the G. T. on Ottawa street, Caulfield and Alexandrine streets; the M. C. crossing on Gratiot avenue, Foundry and John R. streets; the D., G. R. & W. crossings on Michigan avenue and on Lieb and Wight streets; the Electric Light Company's wires at the M. C. crossings on Buchanan, 12th streets, Clark, Porter, Michigan, Livermore, Rudell, Milwaukee, Woodward, Greenwood and Holden avenues, and Grand boulevard; the Union Depot track crossings on Clark, Moran and Junction avenues are not strung in accordance with the statutes.

#### TELEPHONE AND TELEGRAPH WIRES.

The Michigan Telephone Company's wires at the following crossings do not comply with the provisions of the law:

At M. C. crossings on Champlain, Wight, Russell, John R., Greenwood, N. Lincoln, 20th, Fort, 17th, and Porter streets, Gratiot, Milwaukee, Cass, Michigan and Dix avenues, and Grand boulevard; also at the G. T. crossings on Antietam, Adelaide streets, and Gratiot, Mack, Alexandria and Michigan avenues; also Union Depot Company's tracks on Junction avenue, 7th and River streets.

The wires of the Detroit and the New State Telephone Company at the following points were found defective:

At G. T. crossing between Larned and Congress and on Riopelle street; at M. C. crossings on Wight and Fort streets, and at the Union Depot Company's tracks on River and 6th streets.

The city fire alarm wires at the following crossings were improperly constructed:

At G. T. crossings on Michigan, Gratiot, Trombley avenues, Atwater, Macomb, Alfred, Beaubien streets; at the M. C. crossings on Gratiot, Milwaukee, Cass, Holden, Trumbull, Maybury, Underwood and Clark avenues, 12th, 20th, 24th, Buchanan, Wight, Hastings and John R. streets and Grand boulevard; also the Union depot crossing on Minnie street.

In addition to the above there were some wires belonging to the W. U. Telegraph Co., Edison Illuminating Co., Brush Electric Co., and the G. T. Railroad Co., over railroad tracks, that were found defective.

EATON RAPIDS.

Western Union Telegraph Company's wires at the M. C. and L. S. & M. S. R. R. crossing, are fastened on brackets; same company's wires over L. S. & M. S. elevator tracks, on single cross-arms, and brackets on building.

New State Telephone Company's wires at same place are on single cross-arms and buttons nailed to building.

FLINT.

People's Electric Light Company's wires near G. T. depot are strung over tracks on single cross-arms, with poles 200 feet apart. Same company's wires at east end of G. T. yards, on Avont street; at F. & P. M. crossing to electric plant; at F. & P. M. crossing on Kearsly street; at viaduct south of F. & P. M. depot; at G. T. crossing of Flint Wagon Works track, are all strung on single cross-arms and brackets.

TELEPHONE AND TELEGRAPH WIRES.

W. U. Telegraph Company's wires at G. T. crossing on Saginaw street are on single cross-arms.

Michigan Telephone Company's wires at crossing of G. T. and Saginaw streets; at F. & P. M. crossing on Second street; at F. & P. M. crossing on Kearsly street; at crossing south of F. & P. M. depot; and crossing near Flint Wagon Works over G. T., are all improperly constructed, on single cross-arms and brackets.

Fire alarm wires at G. T. crossing on Avont street; at F. & P. M. planing mill siding on same street, and wire running to alarm box No. 18 are all on brackets and small boards.

FOWLERVILLE.

Electric light wires over D., G. R. & W. R. R., near depot, are strung on single cross-arms, with poles 100 feet apart.

HOLLAND.

Electric light wires belonging to city of Holland on 8th street and 10th street crossings of C. & W. M. R. R. are constructed on single cross-arms, with wooden pins, and poles 200 feet apart.

The Fire Alarm and Michigan Telephone Company's wires are also on single cross-arms and wooden pins.

LUDINGTON.

The Electric Light Company's wires over F. & P. M. tracks, near depot and near engine house, are strung on single cross-arms and fastened with wooden pins.

Michigan Telephone Co.'s wires at F. & P. M. yards near the dock, and South James street crossing near depot, are improperly strung.

## HOWELL.

Electric wires at D., G. R. & W. R. R. crossings, near depot, are on single cross-arms with wooden pins.

## GRAND RAPIDS.

The Grand Rapids Consolidated Street Railway Company's trolleys were found too low at the following points:

At D., G. R. & W. crossing on South Division street, 21 feet 6 inches.  
C. & W. M. (Phoenix side track) crossing on West Fulton, 20 feet 1 inch.

C. & W. M. crossing on West Fulton, 20 feet 6 inches.  
C. & W. M. crossing on Shawmut avenue, 20 feet 8 inches.  
C. & W. M. crossing on West Leonard street, 21 feet 10 inches.  
C. & W. M. crossing on Grandville avenue, 20 feet 5 inches.  
C. & W. M. crossing on Prescott street, 20 feet 10 inches.  
G. R. & I. crossing on Shawmut avenue, 20 feet 8 inches.  
G. R. & I. crossing on West Leonard street, 21 feet 10 inches.  
D., G. H. & M. crossing on Quimby street, 21 feet 1 inch.

## IONIA.

The Ionia Electric Light Company's wires at the D., G. H. & M. crossings on Steel, Welton, Jackson and Mill streets, are all strung on single cross-arms and wooden pins.

The Michigan Telephone Company's wires at the D., G. H. & M. crossing on Dexter street, and at the D., G. R. & W. crossing on Jefferson avenue, are strung on single cross-arms.

The W. U. Telegraph Co.'s wires at the D. G. R. & W. crossing on Mill street are strung on single cross-arms.

The fire alarm wires at all railroad crossings are defective.

## JACKSON.

The electric wires at the following points are on single cross-arms and fastened with wooden pins, and do not comply with the statute in regard to the distance between the poles:

At M. C. crossings on North, Ingham streets, and Elm and Warren avenues, and at G. T. crossing on Ganson street.

The Michigan Telephone Company's wires at G. T. and M. C. crossings on Ganson street are strung on single cross-arms with brackets.

## KALAMAZOO.

The Citizens' Street Railway Company's trolleys at the following points do not comply with the law:

At G. R. & I. crossing on East Man street, 21 feet 2 inches.

At L. S. & M. S. crossing on East Main street, 21 feet 8 inches.

At L. S. & M. S. crossing on Portage street, 21 feet 4 inches.

At M. C. crossing on East avenue, 20 feet and 6 inches.

At M. C. crossing on West Main street, 21 feet 5 inches.

At M. C. crossing on North street, 21 feet 2 inches.

The W. U. Telegraph Co., G. R. & I. Telegraph Co., Kalamazoo Telephone Co., and Electric Light Company's wires at all points where they cross railroads, are not strung in accordance with the statute.

#### MANISTEE.

The Manistee, Filer City & East Lake Railway Company's wires (trolley) at the following points are too low:

At M. & G. R. crossing on 8th street, 18 feet 2 inches.

(Feed wires at same point 21 feet 6 inches.)

At F. & P. M. crossing, three blocks east of depot, 20 feet 10 inches.

The electric wires at the M. & N. E. shops and at the River crossings are on single cross-arms, brackets and wooden pins.

The Michigan Telephone and W. U. Telegraph Company's wires at River street crossing of the M. & N. E. are on single cross-arms and brackets.

#### MUSKEGON.

The Muskegon Street Railway trolleys at the following points are not the proper distance above the tracks:

At C. & W. M. crossing on Ottawa street, 20 feet 6 inches.

At C. & W. M. crossing on Western avenue, 20 feet 1 inch.

At C. & W. M. crossing at street railway shops, 17 feet 6 inches.

At C. & W. M. crossing at Muskegon Steel Works, 17 feet 6 inches.

At C. & W. M. crossing at Lake Michigan Park track, 17 feet 6 inches.

At T., S. & M. crossing on Western avenue, 19 feet.

At T., S. & M. crossing on Sanford street, 20 feet 7 inches.

At G. R. & I. crossing on Western avenue, 19 feet.

At G. R. & I. crossing on Sandford street, 21 feet 1 inch.

The Michigan Telephone Co., Muskegon Electric Light Co, W. U. Telegraph Co. and the G. R. & I. Telegraph Co., are all using single cross-arms, wooden pins, small poles and brackets.

#### OWOSSO.

The Owosso & Corunna Traction Company's trolley wires at the following points are not strung in accordance with the statute:

At A. A. crossing on Washington street, 21 feet 2 inches.

At A. A. crossing at the power house, 21 feet 4 inches.

At A. A. crossing on Corunna street, 20 feet 9 inches.

The Caledonia Electric Light Company's wires at A. A. crossing on Washington, and the D., G. H. & M. crossings in front of the power house, are on single cross-arms.

The Postal Cable and Telegraph Co., Michigan Telephone Co., and the W. U. Telegraph Co.'s wires at all railroad crossings are defective.



## PONTIAC.

The Oakland Railway Company's trolley at the following crossings are defective:

At G. T. crossing, 20 feet 3 inches.

At G. T. crossing three-fourth mile east of depot, 21 feet.

At P., O & N. crossing near depot, 21 feet 3 inches.

The Standard Electric Light Company's wires at the following points are on single cross-arms:

At G. T. crossings on Florence and Warren streets, and at the P., O. & N. crossings on Howard street and G. T. Junction.

The W. U. Telegraph, New Telephone and Michigan Telephone Companies use single cross-arms and wooden pins.

## PORT HURON.

The City Electric Railway Company's trolley wires at the following points are too low:

At G. T. crossing on Pine Grove avenue, 21 feet 9 inches, and at the F. & P. M. crossing on Pine Grove avenue, 20 feet 1 inch.

The Excelsior Electric Light Company's wires at the following points are strung on single cross-arms and wooden pins are used:

At F. & P. M. crossings at grain elevator, water works, and near depot; and also on Butler, Quay, Military, 24th and Stone streets.

The Michigan Telephone Company's wires at the F. & P. M. crossings on Bard, Butler and Sarnia streets, and the G. T. crossings on Clyde, Quay, Military, Stone and Park streets, are improperly strung on single cross-arms and wooden pins.

The New State Telephone Company's wires at the grain elevator near depot, and the F. & P. M. crossings on 10th and West Park streets, are defective.

## REED CITY.

G. R. & I. Telegraph Company's wires are on single cross-arms at all railroad crossings.

## SAGINAW (EAST SIDE).

The Saginaw Electric Light and Power Company's wires are improperly strung at the following points:

At the M. C. crossing on Alger, Holden, Emerson, South Tilden streets, and Jefferson avenue, on first street south of Warren avenue, on first street north of Warren avenue, and on first street north of Atwater street; at the F. & P. M. crossings on Mackinaw and Washington streets; at the belt line crossings on Center and Hess streets; at the C., S. & M. crossings on Atwater, Thompson, Mackinaw streets and east of the depot.

The Swift Electric Light Company's wires at the F. & P. M. crossing on Third street are strung on single cross-arms and with wooden pins.

The Michigan Telephone Company's wires at the following crossings are defective, and do not comply with the statute:

At F. & P. M. crossings on First, Wardsworth, Sheridan, Mackinaw, Hess and Washington streets; at M. C. crossings on Jefferson, Atwater and Emerson streets; at the belt line crossing on Jefferson avenue and at the C., S. & M. crossing on Holland avenue.

The W. U. Telegraph wires at F. & P. M. crossings on Merson street and at Barber Asphalt Co. are strung on single cross-arms.

The city fire department wires at F. & P. M. crossings on Fourth, Hess and Washington streets; at the M. C. crossings on First, Atwater and Holden streets, and Jefferson avenue; and the T. S. & M. crossings on South Washington and Holland avenue, and Thompson street, are improperly strung and wooden pins are used.

#### SAGINAW (WEST SIDE).

The Saginaw Electric Light and Power Company's wires at the following points are defective, single cross-arms, brackets and wooden pins being used:

At M. C. crossings on Michigan, Cleveland, Madison and Bristol streets; at C., S. & M. crossing on Genesee avenue, and the belt line crossing on the Gratiot road.

The Michigan Telephone Company's wires at the following points do not comply with the requirements of the statute:

At the M. C. crossings on first and second streets east of Michigan avenue; on Cleveland, Madison, Monroe and Clinton streets; and the belt line crossings at Gratiot road and the first road north of Gratiot road.

The fire alarm wires at the following crossings are improperly constructed:

At the belt line crossing on Michigan avenue, and at the M. C. crossings on Cleveland, Monroe, Bristol and Genesee streets.

#### ST. JOHNS.

The electric light wires at the D., G. H. & M. depot and at the crossing on Clinton street are strung on single cross-arms.

The Crowley Telephone Company's wires on Clinton street are on single arms and wooden pins.

#### WHITE CLOUD.

The electric light wires at the depot are strung on single cross-arms.

#### WILLIAMSTON.

The electric light wires over the D., G. R. & W. are on single cross-arms and the poles 150 feet apart.

CIRCULARS ISSUED BY THE COMMISSIONER OF  
RAILROADS DURING THE YEAR 1897, AP-  
PROVING STYLES OF FENCING.

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STATE OF MICHIGAN, }  
OFFICE OF THE COMMISSIONER OF RAILROADS. }

To General Managers and Superintendents of Railroads in the State  
of Michigan:

The Consolidated Steel and Wire Company of Chicago, having made application for the official approval of the Commissioner of Railroads, of the consolidated field fencing, so called, to be used by railroad companies for right of way fence, and having made a personal inspection and test of said fence, and being satisfied that the same is equal in strength, closeness of construction and efficiency, to prevent the passage of all stock through the same, and equals the height of the standard fence now required by law;

Now, Therefore, By virtue of the power vested in me by section 15, article IV, act 198, laws of 1873, and acts amendatory thereof, as amended by act 26, laws of 1889, authority is hereby granted to the railroad companies of this State to use the said consolidated field fencing for fencing their respective rights of way, subject to the following conditions:

Railroad companies using this fence will be required to comply with the law for railroad fence as to dimensions of posts and setting the same, and leveling the inequalities of ground under the fence: Provided, The posts used in construction may be placed at a distance of 16 feet apart from center to center.

The fence shall be constructed in accordance with attached plan with specifications as follows: The fence shall consist of twelve steel lateral or strand wires, bottom and top wires No. 9 gauge; all other strand wires No. 11 gauge. The spaces beginning at the bottom to be  $2\frac{1}{2}$ , 3,  $3\frac{1}{2}$ , 4,  $4\frac{1}{2}$ , 5,  $5\frac{1}{2}$ , 6, 7, 8 and 9 inches.

There shall be a vertical stay wire of No. 12 gauge, wrapped and immovably fixed to each strand wire, not to exceed one foot apart.

IN TESTIMONY WHEREOF, Witness my hand and the official seal of this department, this eighth day of April, A. D. 1897.

(Signed.)

SYBRANT WESSELIUS,  
Commissioner of Railroads.

STATE OF MICHIGAN, }  
OFFICE OF THE COMMISSIONER OF RAILROADS. }

To General Managers and Superintendents of Railroads in the State of Michigan:

The Lamb Wire Fence Company of Tecumseh, Michigan, having made application for the official approval of the Commissioner of Railroads, of the Lamb Woven Wire Fence, so called, to be used by railroad companies for right of way fence, and having made a personal inspection and test of said fence, and being satisfied that the same is equal in strength, closeness of construction and efficiency, to prevent the passage of all stock through the same, and equals the height of the standard fence now required by law;

Now, Therefore, By virtue of the authority vested in me by section 15, article IV, act No. 198, laws of 1873, and acts amendatory thereof, as amended by act 26, laws of 1889, authority is hereby granted to the railroad companies of this State to use the said Lamb woven wire fence for fencing their respective rights of way, subject to the following conditions:

Railroad companies using this fence will be required to comply with the law for railroad fence as to dimensions of posts and setting the same, and leveling the inequalities of ground under the fence: Provided, The posts used in construction may be placed at a distance of 16 feet apart from center to center.

The fence shall be constructed in accordance with attached plan with specifications as follows: The fence shall consist of 11 lateral or strand wires, bottom wire to be No. 9 gauge and top wire to be No. 7 gauge. The bottom wire shall be strung not to exceed three inches from the ground, and the spaces between lateral wires beginning from the bottom shall be as follows: 3, 3½, 4, 4½, 5½, 6, 7, 7½, 8 and 9 inches.

There shall be vertical steel stay wires of No. 11 gauge wrapped and immovably fixed to each lateral wire not to exceed 14 inches apart.

IN TESTIMONY WHEREOF, Witness my hand and the official seal of this department, this third day of May, A. D. 1897.

(Signed.)

SYBRANT WESSELIUS,  
Commissioner of Railroads.

STATE OF MICHIGAN,  
OFFICE OF THE COMMISSIONER OF RAILROADS. }

To General Managers and Superintendents of Railroads in the State of Michigan:

The McMullen Woven Wire Fence Company of Chicago, having made application for the official approval of the Commissioner of Railroads, of McMullen's steel wire cable fencing, so called, to be used by railroad companies for right of way fence, and having made a personal inspection and test of said fence, and being satisfied that the same is equal in strength, closeness of construction and efficiency, to prevent the passage of all stock through the same, and equals the height of fence now required by law;

Now, Therefore, By virtue of the authority vested in me by section 15, article IV, act No. 198, laws of 1873, and acts amendatory thereof, as amended by act 26, laws of 1889, authority is hereby granted to the railroad companies of this State to use the said McMullen steel wire cable fencing for fencing their respective rights of way, subject to the following conditions:

Railroad companies using this fence will be required to comply with the law for railroad fence as to dimensions of posts and setting the same, and leveling inequalities of ground under the fence so that lower strand shall not be over three inches from ground at any point: Provided, That posts used in construction may be placed at a distance of 16 feet apart from center to center.

The fence shall be constructed in accordance with the attached plan with specifications as follows: The fence shall consist of ten lateral cables as follows: Top cable, four strands No. 12 steel wire; next eight cables, each two strands No. 13 steel wire; bottom cable, two strands No. 12 steel wire, with twenty-four cross or tie wires to the rod of No. 13 gauge. The spaces between the cables beginning at the bottom to be  $3\frac{1}{2}$ ,  $3\frac{1}{2}$ ,  $3\frac{1}{2}$ , 6, 6, 6, 9, 9, 9, inches.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the department to be affixed at the Capitol, in the city of Lansing, this twenty-second day of October, A. D. 1897.

(Signed.)

SYBRANT WESSELIUS,  
Commissioner of Railroads.

## BOARD OF RAILROAD CROSSINGS.

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The Board of Railroad Crossings is composed of the Commissioner of Railroads, the Secretary of State and the Attorney General.

It is their duty to examine and approve or disapprove all maps filed, showing the line of proposed railroads or extensions of established lines.

It is their especial duty to carefully investigate all proposed crossings of the tracks of other railroads, and to order at these crossings such mechanical safety appliances, or other protection from danger of collision, as in their judgement the interests of public safety demand.

The following is a brief summary of the record of proceedings of the board for the year 1897:

The board met on February 4 to consider a map filed by the Lake Superior & Ishpeming Railway Company, showing proposed extension of their line in the city of Ishpeming, with numerous crossings of the tracks of the Duluth, South Shore & Atlantic Railway and the Chicago & Northwestern Railway. Serious objections were made to the proposed crossings, and the Board adjourned until February 19 to allow the officials of the roads in interest to make an amicable arrangement for the crossings, if possible.

Another meeting was held on February 19, but the railroad companies, being still unable to agree, a further adjournment was taken until March 30. In the meantime an inspection of the location was ordered made by the Secretary of State, the Attorney General and Mechanical Engineer E. F. Moore.

On March 30, the board met, listened to the report of the inspection and adjourned until April 1, at which time the map was approved, and a first-class interlocking switch and signal system was ordered at the crossing.

At a meeting of the board held on February 4, a map was presented by the Munising Company, showing route of their line through Alger and Marquette counties, with crossing of the tracks of the Duluth, South Shore & Atlantic Railway. At this meeting letters were received from the chief engineer of the Duluth, South Shore & Atlantic Railway, waiving the right of notice, and stating that an amicable arrangement had been made for the crossing in question, the Duluth, South Shore & Atlantic crossing over the tracks of the Munising Railway.

The map as presented was approved at this meeting.

On March 30, the board met to consider a map filed by the Detroit & Lima Northern Railway, showing line through Lenawee county and

the city of Adrian, with crossing of the Lake Shore & Michigan Southern Railway. Without any action being taken, the board adjourned to meet in the city of Adrian April 2 for an inspection of the premises. After making this inspection, another meeting was held on April 8, at which time the map was approved and a first-class interlocking and derailing switch and signal system ordered installed and maintained at the crossing.

On April 27, the Au Sable & Northwestern Railroad Company presented a map showing line through Montmorency county, with crossing of the Bear Lake branch of the Michigan Central Railroad.

An amicable arrangement was made for this crossing and the map was approved, gravity gates being ordered for protection to the crossing.

A meeting was held on June 18 for the consideration of a map filed by the St. Joseph Valley Railway Company, showing extension of their line in the city of Benton Harbor, with crossings of the Cleveland, Cincinnati, Chicago & St. Louis and the Chicago & West Michigan Railways. An inspection of the location of these crossings was made by the board on June 28, another meeting held on July 27, and finally on August 7 the map was approved, and a first-class interlocking plant ordered at said crossings.

The Detroit & Mackinac Railway Company presented a map on September 1, showing route of line through Presque Isle county, and as there were no crossings involved in this line, the map was approved at this meeting.

On September 8, a map was considered showing change of route of the Mineral Range Railroad through Houghton county, with crossing of the Hancock & Calumet Railroad. This company having waived the right of notice and all objections to the proposed crossing, the map was approved with the understanding that a first-class interlocker be maintained at the crossing.

On October 21, a map was presented by the Grand Rapids, Kalkaska & Southeastern Railroad Company showing line through Kalkaska county, with crossing of the Grand Rapids & Indiana Railroad in the village of Kalkaska. This map was approved and a second-class interlocker ordered at the crossing.

Meetings were held on November 2 and 3 to consider maps filed by the Detroit & Lima Northern Railway, showing route of their line through Monroe and Wayne counties, with crossings of the Ann Arbor, Flint & Pere Marquette, Lake Shore & Michigan Southern, and the Michigan Central Railroads. An inspection of the location of these crossings was made on November 11, and on November 15 the maps were approved, first-class interlockers being ordered at the crossings of the Ann Arbor Railway, and the crossings of the Lake Shore & Michigan Southern and the Michigan Central Railroads, with second-class interlockers at all crossings of spur tracks, except where the Commissioner of Railroads should decide them to be unnecessary, the necessity for crossing of the Flint & Pere Marquette being obviated.

On November 19, the Grand Rapids, Kalkaska & Southeastern Railroad Company presented a map showing extension of their line in Kalkaska and Missaukee counties, and as there was no crossings shown on this map it was approved.

The Boyne City & Southeastern Railroad Company presented a map on November 19, showing extension of their line in Charlevoix county, with crossing of the Grand Rapids & Indiana Railroad. Action on this map was deferred until November 29 to allow the G. R. & I. Co. to file their objections to the proposed crossing. Map approved November 29 and second-class interlocker ordered.

On November 20, the Toledo & Northwestern Railroad Company presented a map showing route of their line through Calhoun and Eaton counties, with junctions with the Michigan Central and Grand Trunk Railroads. Action on this map was postponed until December 3 in order that the companies in interest might be properly notified. Map approved December 10.



## ARTICLES OF ASSOCIATION FILED BY RAIL- ROAD CORPORATIONS DURING THE YEAR 1897.

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Detroit, Grand Rapids & Western Railroad Company. Capital stock, \$5,693,500.

This is a reorganization of the Detroit, Lansing & Northern Railway Company. Articles were filed on December 6, 1896, and January 1, 1897, this company began operating all the lines formerly owned and leased by the Detroit, Lansing & Northern and the Saginaw Valley & St. Louis Railroad Companies.

The Benton Harbor Electric Railway & Transit Company. Capital stock, \$650,000.

Proposed line from Benton Harbor to Allegan, 80 miles. Filed January 13.

Detroit & Cincinnati Railway Company, amendment to articles of association, changing name of company to Detroit & Lima Northern Railway Company. Filed February 20.

Detroit & Lima Northern Railway Company. Amendment to articles of association, increasing capital stock from \$500,000 to \$5,000,000. Filed April 10.

Toledo & Milwaukee Railroad Company. Capital stock, \$1,500,000.

Proposed line from State line between Ohio and Michigan, in Monroe county, to Allegan, being part of the Cincinnati, Jackson & Mackinaw Railroad. Filed June 21.

Milwaukee, Benton Harbor & Columbus Railway Company. Capital stock, \$600,000.

Proposed line from Benton Harbor to Nappanee, Indiana, being a consolidation of the St. Joseph Valley Railway Company and the Benton Harbor & Southeastern Railway Company. Filed August 10.

Toledo & Milwaukee Railroad Company. Amendment to articles of association changing name of company to Detroit, Toledo & Milwaukee Railroad Company. Filed September 7.

Grand Rapids, Kalkaska & Southeastern Railroad Company. Capital stock, \$250,000.

## ANNUAL REPORT OF THE

## 1.—TRACK MILEAGE.

Road number.	Railroads.	Road owned.		Road operated.	
		Total miles.	Miles in Michigan.	Total miles.	Miles in Michigan.
1	Ann Arbor .....	302.73	296.73	302.73	296.73
2	Arcadia & Betsay River .....	23.	23.	17.50	17.50
3	Au Sable & Northwestern .....	108.	108.	108.	108.
4	Bay City Belt Line .....	8.09	8.09		
5	Boyne City & Southeastern .....	16.	16.	16.	16.
6	Buchanan & St. Joseph .....	1.75	1.75		
8	Chicago, Detroit & C. G. T. Junction .....	59.87	59.87	59.87	59.87
9	Chicago & Grand Trunk .....	326.50	224.	335.27	224.
10	Chicago, Kalamazoo & Saginaw .....	44.20	44.20	44.20	44.20
12	Chicago, Milwaukee & St. Paul .....	6,150.75	152.08	6,150.75	152.08
13	Chicago & Northwestern .....	3,782.29	521.19	5,080.78	521.19
14	Chicago & West Michigan .....	488.50	454.04	581.11	546.65
15	Chicago & North Michigan .....	92.61	92.61		
16	Cincinnati, Jackson & Mackinaw .....	323.70	155.18	414.49	190.87
16½	Jackson & Cincinnati .....	17.65	17.65		
17	Cincinnati, Saginaw & Mackinaw .....	53.00	53.00	53.00	53.00
18	Cleveland, Cincinnati, Chicago & St. Louis .....	1,804.74	35.14	1,804.74	35.14
19	Detroit, Grand Haven & Milwaukee .....	189.	189.	189.	189.
20	Detroit, Lansing & Northern System .....	358.78	358.78	378.82	378.82
23	Detroit & Mackinac .....	296.40	296.40	296.40	296.40
24	Duluth, South Shore & Atlantic .....	571.71	465.18	588.33	475.03
25	Flint & Pere Marquette .....	735.43	735.43	783.66	778.01
25½	Monroe & Toledo .....	18.72	18.		
26	Gogebic & Montreal Riv. (Op'd by Wis. Central) .....	16.80	16.80	16.30	16.30
27	Grand Rapids & Indiana System .....	436.34	380.13	584.79	442.98
28	Muskegon, Grand Rapids & Indiana .....	86.85	86.85		
29	Traverse City .....	26.	26.		
30	Hancock & Calumet .....	31.19	31.19	31.42	31.42
31	Indiana & Lake Mich. (Op'd by Terre Haute & I.) .....	39.28	25.05	39.29	25.05
32	Iron Range & Huron Bay .....	34.	34.		
33	Lake Shore & Michigan Southern System .....	1,117.51	407.54	1,439.66	575.27
34	Detroit & Chicago (L. S. & M. S.) .....				
35	Detroit, Hillsdale & Southwestern .....	65.20	65.20		
36	Detroit, Monroe & Toledo (L. S. & M. S.) .....				
37	Fort Wayne & Jackson .....	97.83	44.54		
38	Kalamazoo, Allegan & Grand Rapids .....	58.42	58.42		
39	Kalamazoo & White Pigeon (L. S. & M. S.) .....				
40	Northern Central Michigan " " .....				
41	Sturgis, Goshen & St. Louis " " .....				
42	Lima Northern .....	78.02	6.40	87.07	15.90
43	Lowell & Hastings .....	12.50	12.50	12.50	12.50
44	Manistee & Grand Rapids .....	44.71	44.71	44.71	44.71
45	Manistee & Northeastern and Supplementary .....	90.50	90.50	90.50	90.50
46	Manistique .....	59.50	59.50	59.50	59.50
47	Manistique & Northwestern (Not operated) .....	11.	11.		
48	Mason & Oceana .....	27.	27.	27.	27.
49	Michigan Air Line Railway .....	105.60	105.60	105.60	105.60
50	Michigan Central System .....	270.07	221.	1,642.37	1,136.55
51	Battle Creek & Sturgis .....	33.80	33.80		
52	Bay City & Battle Creek .....	18.	18.		
53	Canada Southern Bridge .....	3.66	3.66		
54	Detroit & Bay City .....	149.90	149.90		
55	Detroit, Delray & Dearborn .....	4.84	4.84		
56	Grand River Valley .....	83.79	83.79		
57	Jackson, Lansing & Saginaw .....	322.90	322.90		
58	Kalamazoo & South Haven .....	39.50	39.50		
59	Michigan Air Line R. R. .....	115.16	109.10		
60	Michigan Midland & Canada .....	14.68	14.68		
61	Saginaw Bay & Northwestern .....	83.01	83.01		
62	Toledo, Canada Southern & Detroit .....	58.92	47.27		

# COMMISSIONER OF RAILROADS.

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## 1.—TRACK MILEAGE.—CONTINUED.

Track in Michigan.											Road number.
Main.	Main second.	Sidings and spurs.	Estimated as single track.	Gauge.		Main track, 1895.	Increase, 1895.	Decrease, 1895.	Track in joint use.		
				Feet.	Inches.						
296.73		53.57	350.30	4	8½	298.80	2.93			1	
23.			23.00	4	8½	17.50	5.50			2	
108.			108.	3		108.				3	
8.09		4.71	12.80	4	8½	8.09				4	
16.			16.	4	8½	14.	2.			5	
1.75			1.75			1.75				6	
59.37		26.53	85.90	4	8½	59.37				8	
224.	20.11	65.04	309.15	4	8½	224.				9	
44.20		4.09	48.19	4	8½	44.20				10	
152.08		48.57	200.65	4	8½	152.08				12	
521.19		174.54	695.73	3		521.19				13	
454.04		155.01	609.05	4	8½	448.66	5.38			14	
92.61			92.61	4	8½	92.61				15	
155.18		19.22	174.40	4	8½	155.18				16	
17.65		1.26	18.91	4	8½		17.65			16½	
53.		32.64	85.64	4	8½	53.				17	
35.14		8.21	43.35	4	8½	33.40	1.74			18	
189.		69.14	258.14	4	8½	189.				19	
358.78		112.05	470.83	4	8½	358.78				20	
296.40		30.	326.40	4	8½	253.	43.40			23	
465.18		109.02	574.20	4	8½	464.71	.47			24	
735.43		177.81	913.24	4	8½	732.08		16.65		25	
18.			18.	4	8½		18.00			25½	
16.30		13.12	29.42	4	8½	16.19	.11			26	
380.13	8.10	117.29	500.52	4	9	383.21		3.06		27	
36.85		8.12	44.97	4	9	36.85				28	
26.		4.32	30.32	4	9	26.				29	
31.19		11.75	42.94	3		34.31		3.12		30	
25.05		5.51	30.56	4	8½	25.05				31	
34.			34.			34.00				32	
407.54		103.17	510.71	4	8½	407.88		.34		33	
65.20		4.29	69.49	4	8½	65.20				34	
44.54		4.81	49.35	4	8½	44.54				35	
58.42		11.58	70.00	4	8½	58.42				36	
										37	
										38	
										39	
										40	
6.40			6.40	4	8½		6.40		9.50	41	
12.50		1.00	13.50	4	8½	12.50				42	
44.71		13.52	58.23	4	8½	31.23	13.48			43	
90.50		21.00	111.50	4	8½	90.48	.02			44	
59.50		8.	67.50	4	8½	59.50				45	
11.			11.				11.			46	
27.		10.	37.	3		27.				47	
105.60		9.47	115.07	4	8½	105.60				48	
221.		190.59	411.59	4	8½	221.				49	
33.80		4.01	37.81	4	8½	33.80				50	
18.		2.41	20.41	8	8½	18.				51	
3.66		1.75	5.41	4	8½	3.66				52	
149.90		63.55	213.45	4	8½	149.90				53	
4.84		.32	5.16	4	8½	4.84				54	
83.79		16.78	100.57	4	8½	83.79				55	
322.90		234.23	557.13	4	8½	322.90				56	
39.50		5.13	44.63	4	8½	39.50				57	
109.10		22.29	131.39	4	8½	109.10				58	
14.68		.92	15.60	4	8½	14.68				59	
88.01		10.57	93.58	4	8½	82.79	.22			60	
47.27		40.55	87.82	4	8½	47.27				61	
										62	

## ANNUAL REPORT OF THE

## 1.—TRACK MILEAGE.—CONTINUED.

Road number.	Railroads.	Road owned.		Road operated.	
		Total miles.	Miles in Michigan.	Total miles.	Miles in Michigan.
63	Midland & Hubbard .....	10.	10.		
64	Midland & Northern .....			10.	10.
65	Mineral Range .....	17.40	17.40	17.40	17.40
66	Minneapolis, St. Paul & Sault Ste. Marie .....	1,170.21	198.59	1,188.71	199.23
67	Munising .....	25.49	25.49	25.49	25.49
68	Pontiac, Oxford & Northern .....	100.59	100.59	100.59	100.59
69	Saginaw, Tuscola & Huron .....	66.57	66.57	66.57	66.57
72	Sault Ste. Marie Bridge Co. ....	1.22	.36		
73	South Haven & Eastern .....	36.60	36.60	36.60	36.60
74	St. Clair Tunnel .....	2.25	1.12½	2.25	1.12½
75	St. Joseph Valley (Not operated) .....	10.	10.		
76	Superior Terminal (Included in D. S. S. & A.) .....	8.	8.		
77	Toledo, Saginaw & Muskegon .....	96.	96.	96.	96.
78	Wisconsin & Michigan .....	63.55	30.73	72.07	31.95
79	Wabash .....	1,594.	75.90	1,979.60	80.50
80	Detroit Union R. R. Depot & Station Co. ....	3.34	3.34		
81	The Fort St. Union Depot Co. ....	1.41	1.41		
ORE AND FOREST ROADS.					
1	Bear Lake & Eastern .....	18.	18.	18.	18.
2	Crawford & Manistee River .....	10.	10.	10.	10.
3	Dead River (Operated by D. S. S. & A.) .....	2.98	2.98		
4	Hecla & Torch Lake .....	7.50	7.50	7.50	7.50
5	Lake Superior & Ishpeming .....	20.50	20.50	20.50	20.50
6	Lewiston & Southeastern .....	10.	10.	10.	10.
7	Manistee & Luther .....	63.	63.	63.	63.
8	Quincy & Torch Lake .....	6.	6.	6.	6.
	Total .....	22,703.52	7,759.08½	25,045.14	7,765.72½

COMMISSIONER OF RAILROADS.

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1.—TRACK MILEAGE.—CONCLUDED.

Track in Michigan.										Road number.
Main.	Main second.	Sidings and spurs.	Estimated as single track.	Gauge.		Main track, 1895.	In-crease, 1896.	De-crease, 1896.	Track in joint use.	
				Feet.	Inches.					
10.			10.	4	8½	10.				63
17.40	N	4.37	21.77	3		19.85		2.45		64
198.89		35.50	234.39	4	8½	198.89				65
25.49		8.67	34.16	4	8½	7.02	18.47			66
100.59		7.61	108.20	4	8½	100.20	.39			67
66.57		15.76	82.33	4	8½	66.57				68
.36			.36	4	8½	.36				69
36.60		1.20	37.80	3		36.60				70
1.12½			1.12½	4	8½	1.12½				71
10.		.50	10.50	4	8½	10.				72
8.			8.	4	8½	8.				73
96.		10.07	106.07	4	8½	96.				74
30.73		3.55	34.28	4	8½	29.28	1.45			75
75.90		38.50	114.40	4	8½	75.90				76
3.34		3.50	6.84	4	8½	3.34				77
1.41		1.27	2.68	4	8½	1.41				78
18.			18.	3		18.				79
10.		3.	13.	3		13.		3.00		80
2.98		.17	3.15	4	8½	2.98				81
7.50			7.50	4	1	7.50				82
20.50		6.35	26.85	4	8½		20.50			83
10.		3.	13.	3			10.			84
63.			63.	3		63.				85
6.		1.38	7.38	3		6.				86
7,759.08½	23.21	2,165.86	9,958.15½			7,608.61½	179.11	28.64	9.50	

## 2.—CAPITAL STOCK.

Road No.	Railroads	Par value of shares.	Number of shares issued.
1	Ann Arbor.....	\$100 00	72,500
2	Arcadia & Betsey River.....	100 00	1,400
3	Au Sable & Northwestern.....	100 00	
4	Bay City Belt Line.....	100 00	1,000
5	Boyer City & Southeastern.....	100 00	500
7	Central Michigan.....	100 00	
8	Chicago, Detroit & C. G. T. Junction.....	100 00	10,950
9	Chicago & Grand Trunk.....	100 00	66,000
10	Chicago, Kalamazoo & Saginaw.....	100 00	4,100
12	Chicago, Milwaukee & St. Paul.....	100 00	723,131.61
13	Chicago & Northwestern.....	100 00	663,838
14	Chicago & West Michigan.....	100 00	74,482
15	Chicago & North Michigan.....	100 00	162,808
16	Cincinnati, Jackson & Mackinaw.....	100 00	15,000
17	Cincinnati, Saginaw & Mackinaw.....	100 00	
18	Cleveland, Cincinnati, Chicago & St. Louis.....	100 00	379,873.35
19	Detroit, Grand Haven & Milwaukee.....	50 00	30,000
20	Detroit, Lansing & Northern System.....	100 00	43,356
21	Grand Rapids, Lansing & Detroit.....	100 00	280
22	Saginaw & Western.....	100 00	45
23	Detroit & Mackinac.....	100 00	20,450
24	Duluth, South Shore & Atlantic.....	100 00	220,000
25	Flint & Pere Marquette.....	100 00	96,402
26	Gogebic & Montreal River (Operated by Wisconsin Central).....	100 00	6,000
27	Grand Rapids & Indiana System.....	100 00	55,697
28	Muskegon, Grand Rapids & Indiana.....	100 00	200
29	Traverse City.....	100 00	2,050
30	Hancock & Calumet.....	100 00	3,500
31	Indiana & Lake Michigan (Operated by Terre Haute & Indiana).....	100 00	8,000
32	Iron Range & Huron Bay.....	100 00	7,640
33	Lake Shore & Michigan Southern System.....	100 00	500,000
34	Detroit & Chicago.....	100 00	10,000
35	Detroit, Hillsdale & Southwestern.....	100 00	13,500
36	Detroit, Monroe & Toledo.....	100 00	4,141
37	Fort Wayne & Jackson.....	100 00	27,275.48
38	Kalamazoo, Allegan & Grand Rapids.....	100 00	6,100
39	Kalamazoo & White Pigeon.....	100 00	2,309
40	Northern Central Michigan.....	100 00	6,000
41	Sturgis, Goshen & St. Louis.....	100 00	3,000
42	Lima Northern.....	100 00	24,000
43	Lowell & Hastings.....	100 00	1,896
44	Manistee & Grand Rapids.....	100 00	50
45	Manistee & Northeastern & Supplementary.....	100 00	20,000
46	Manistique.....	100 00	1,500
47	Manistique & Northwestern.....	100 00	1,050
48	Mason & Oceana.....	100 00	1,500
49	Michigan Air Line Railway.....	100 00	3,000
50	Michigan Central System.....	100 00	187,380
51	Battle Creek & Sturgis.....	100 00	5,000
52	Bay City & Battle Creek.....	100 00	3,000
53	Canada Southern Bridge.....	100 00	4,500
54	Detroit & Bay City.....	100 00	20,000
55	Detroit, Delray & Dearborn.....	100 00	35
56	Grand River Valley.....	100 00	4,912
57	Jackson, Lansing & Saginaw.....	100 00	20,000
58	Kalamazoo & South Haven.....	100 00	3,254
59	Michigan Air Line R. R.....	50 00	7,855.25
60	Michigan, Midland & Canada.....	100 00	3,000
61	Saginaw Bay & Northwestern.....	100 00	200
62	Toledo, Canada Southern & Detroit.....	100 00	15,476.68

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**Amount paid in.**

Amount paid in.						Stockholders.		Road No.
On common.	On preferred.	On shares not issued.	Total.	Per mile of road.	Amount held in Michigan	Whole No.	No. in Mich.	
\$3,250,000 00	\$4,000,000 00		\$7,250,000 00	\$24,283 72	\$259,600 00	740	3	1
140,000 00			140,000 00	6,829 27	140,000 00	7	7	2
		\$41,500 00	41,500 00	884 25	41,500 00	8	8	3
100,000 00			100,000 00	12,360 94	51,750 00	9	8	4
50,000 00			50,000 00	3,125 00	50,000 00	7	7	5
688,000 00			688,000 00		120,000 00	18	18	7
978,984 67			978,984 67	16,459 55	200 00	8	2	8
6,800,000 00			6,800,000 00	20,214 40	169,800 00	286	18	9
450,000 00			450,000 00	10,181 00	449,900 00	8	7	10
46,027,261 00	27,285,900 00		73,313,161 00	11,919 39	56,100 00	4,766	14	12
44,030,365 97	22,353,454 56		66,383,820 53	13,354 86	167,500 00	5,247	18	13
7,448,200 00		68,600 00	7,511,800 00	12,926 55	7,100 00	645	6	14
10,413,885 00	5,867,000 00		16,280,885 00	50,079 46	17,000 00	259	9	16
1,500,000 00			1,500,000 00	28,801 89	676,500 00	11	8	17
27,987,835 00	10,000,000 00	428,997 45	38,416,832 45	21,286 35	17,800 00	2,642	6	18
1,500,000 00			1,500,000 00	7,936 51	800 00	11	6	19
1,826,800 00	2,510,000 00		4,336,800 00	19,567 63	10,600 00	471	2	20
26,000 00			26,000 00	504 14	100 00	8	1	21
4,500 00			4,500 00	105 71	100 00	9	1	22
2,000,000 00	45,000 00		2,045,000 00	6,899 46		5	1	23
12,000,000 00	10,000,000 00		22,000,000 00	38,481 05	934,000 00	310	15	24
3,293,200 00	6,342,000 00	359,800 00	10,000,000 00	13,533 08	58,200 00	1,566	14	25
600,000 00			600,000 00	86,809 82		6		26
5,569,700 00			5,569,700 00	12,813 04	167,000 00	184	8	27
1,000 00			1,000 00	27 14	1,000 00	8	8	28
205,000 00			205,000 00	7,854 62	35,400 00	73	73	29
850,000 00			850,000 00	11,221 55	100,600 00	12	10	30
800,000 00			800,000 00	20,361 41		6		31
764,000 00		50,000 00	814,000 00	28,941 00	814,000 00	10	10	32
49,466,500 00	538,500 00		50,000,000 00	58,511 01	237,750 00	3,872	27	33
1,000,000 00			1,000,000 00	16,049 00	100 00	10	1	34
1,350,000 00			1,350,000 00	20,705 32	1,700 00	336	3	35
414,100 00			414,100 00	6,640 47	100 00	13	1	36
2,727,548 00			2,727,548 00		114,800 00	407	12	37
610,000 00			610,000 00	10,441 63	3,000 00	99	9	38
230,800 00			230,800 00	6,813 64	400 00	8	4	39
600,000 00			600,000 00	9,977 12	300 00	10	3	40
						8		41
								42
190,120 00			190,120 00	15,209 60	190,120 00	7	7	43
5,000 00		445,000 00	450,000 00	10,087 10	5,000 00	8	8	44
525,765 97			525,765 97	5,809 57	525,765 97	7	7	45
150,000 00			150,000 00	2,521 01	114,800 00	9	7	46
105,000 00			105,000 00		740 00	7	5	47
150,000 00			150,000 00	5,555 55	150,000 00	7	5	48
300,000 00			300,000 00	2,840 91	1,500 00	7	3	49
18,738,000 00			18,738,000 00	69,352 77	116,900 00	1,485	28	50
500,000 00			500,000 00	12,195 12				51
300,000 00			300,000 00	16,666 66				52
450,000 00			450,000 00	22,960 82	6,000 00	16	3	53
2,000,000 00			2,000,000 00	13,342 25	800 00	7	3	54
3,500 00			3,500 00	725 21	3,500 00	7	7	55
491,200 00			491,200 00	5,882 27	144,700 00	45	20	56
2,000,000 00			2,000,000 00	6,773 36	1,461,300 00	57	28	57
325,400 00			325,400 00	8,237 97	325,100 00	199	124	58
300,000 00			300,000 00	20,435 96	11,200 00	28	4	59
20,000 00			20,000 00	240 93				60
1,547,662 50			1,547,662 79	26,287 18	1,000 00	17	2	62

## ANNUAL REPORT OF THE

## 3.—CAPITAL STOCK.—CONTINUED.

Road No.	Railroads.	Par value of shares.	Number of shares issued.
63	Midland & Hubbard.....	\$100 00	
64	Midland & Northern.....	100 00	25
65	Mineral Range.....	100 00	3,934
66	Minneapolis, St. Paul & Sault Ste. Marie.....	100 00	210,000
67	Munising.....	100 00	8,700
68	Pontiac, Oxford & Northern.....	100 00	10,000
69	Saginaw, Tuscola & Huron.....	100 00	1,233
70	Saginaw Valley & St. Louis System.....	100 00	2,553
71	Saginaw & Grand Rapids.....	100 00	700
72	Sault Ste. Marie Bridge Co.....	100 00	10,000
73	South Haven & Eastern.....	100 00	2,185
74	St. Clair Tunnel.....	100 00	7,000
75	St. Joseph Valley.....	100 00	8,000
76	Superior Terminal.....	100 00	610
77	Toledo, Saginaw & Muskegon.....	100 00	16,000
78	Wisconsin & Michigan.....	100 00	9,515
79	Wabash.....	100 00	520,000
80	Detroit Union R. R. Depot & Station Co.....	100 00	22,500
81	The Fort Street Union Depot Co.....	100 00	10,000
ORE AND FOREST ROADS.			
1	Bear Lake & Eastern.....	100 00	1,046
2	Crawford & Manistee River.....	100 00	500
3	Dead River.....	100 00	
4	Hecla & Torch Lake.....	100 00	1,000
5	Lake Superior & Ishpeming.....	100 00	10,000
6	Lewiston & Southeastern.....	100 00	800
7	Manistee & Luther.....	100 00	3,000
8	Quincy & Torch Lake.....	100 00	500
	Total.....		4,434,137.84



COMMISSIONER OF RAILROADS.

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2.—CAPITAL STOCK.—CONCLUDED.

Amount paid in.						Stockholders.		Road No.
On common.	On preferred.	On shares not issued.	Total.	Per mile of road.	Amount held in Michigan.	Whole No.	No. in Mich.	
\$12,000 00			\$12,000 00	\$1,200 00	\$12,000 00	7	7	63
2,500 00			2,500 00	250 00	2,500 00	7	7	64
393,400 00			393,400 00	22,609 20	10,000 00	20	10	65
14,000,000 00	\$7,000,000 00		21,000,000 00	17,945 21		87		66
570,000 00			570,000 00	10,000 00	207,000 00	10	2	67
1,000,000 00			1,000,000 00	10,000 00	2,000 00	8	2	68
123,300 00		\$255 88	123,555 88	1,866 02	60,800 00	123	118	69
258,800 00		9,504 01	268,304 01	7,459 27	25,200 00	84	68	70
70,000 00			70,000 00	19,444 44	100 00	24	1	71
1,000,000 00			1,000,000 00		100 00	12	1	72
218,500 00			218,500 00	5,969 95		8	2	73
350,000 00			350,000 00	155,655 00	7,500 00	8	2	74
300,000 00			300,000 00	30,000 00	400 00	7	2	75
	61,000 00	200 00	61,200 00			10	7	76
1,600,000 00			1,600,000 00	16,666 67	500 00	9	5	77
951,500 00			951,500 00					78
28,000,000 00	24,000,000 00		52,000,000 00	32,622 00				79
2,250,000 00			2,250,000 00		2,058,500 00	17	15	80
1,000,000 00			1,000,000 00		276,000 00	15	7	81
104,664 00			104,664 00	5,814 66	104,664 00	7	7	1
50,000 00			50,000 00	5,000 00	50,000 00	7	7	2
1,000 00	51,010 96		52,010 96	17,453 84		7	5	3
100,000 00			100,000 00	13,333 33	200 00	5	3	4
1,000,000 00			1,000,000 00	43,780 49	125,100 00	10	2	5
60,000 00			60,000 00	6,000 00	60,000 00	8	8	6
300,000 00			300,000 00	4,781 90	300,000 00	7	7	7
50,000 00			50,000 00	8,333 34	600 00	7	6	8
\$315,462,842 11	\$120,048,865 52	\$1,398,856 84	\$436,910,564 76	\$18,815 67	\$11,148,239 97	24,500	903	

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## 3.—INDEBTEDNESS.

Road No.	Railroads.	Funded.	Unfunded.	Total.
1	Ann Arbor.....	\$7,000,000 00	\$331,826 08	\$7,331,826 08
2	Aradia & Betsy River.....		335 96	335 96
3	Au Sable & Northwestern.....		145,294 23	145,294 23
4	Bay City Belt Line.....		18,340 23	18,340 23
5	Boyne City & Southeastern.....		49,781 68	49,781 68
7	Central Michigan.....	50,000 00	16,500 00	66,500 00
8	Chicago, Detroit & C. G. T. Junction.....	1,786,141 46		1,786,141 46
9	Chicago & Grand Trunk.....	12,000,000 00	5,298,122 14	17,298,122 14
10	Chicago, Kalamazoo & Saginaw.....		529,175 39	529,175 39
11	Chicago & Kalamazoo Terminal.....			
12	Chicago, Milwaukee & St. Paul.....	138,580,000 00	6,096,008 64	144,676,008 64
13	Chicago & Northwestern.....	131,808,500 00	5,896,470 22	137,194,970 22
14	Chicago & West Michigan.....			
15	Chicago & North Michigan.....	8,187,075 00	458,630 30	8,645,605 30
16	Cincinnati, Jackson & Mackinaw.....	173,322 60	247,668 83	420,991 43
17	Cincinnati, Saginaw & Mackinaw.....	1,725,000 00	279,924 51	2,004,924 51
18	Cleveland, Cincinnati, Chicago & St. Louis.....	55,016,730 00	4,594,561 36	59,611,291 36
19	Detroit, Grand Haven & Milwaukee.....	5,428,000 00	1,975,976 11	7,403,976 11
20	Detroit, Lansing & Northern System.....		7,103,441 68	7,103,441 68
23	Detroit & Mackinac.....	2,900,000 00	191,355 09	3,091,355 09
24	Duluth, South Shore & Atlantic.....	23,678,451 24	3,899,501 63	27,577,952 87
25	Flint & Pere Marquette.....	10,889,000 00	1,589,482 48	11,978,482 48
26	Gogebic & Montreal River (Op'd by Wis. Cent.).....	520,000 00		520,000 00
27	Grand Rapids & Indiana System.....	9,337,000 00	889,417 89	10,176,417 89
28	Muskegon, Grand Rapids & Indiana.....	750,000 00	99,075 00	849,075 00
29	Traverse City.....	440,000 00	12,033 63	452,033 63
30	Hancock & Calumet.....	400,000 00		400,000 00
31	Indiana & Lake Mich. (Op'd by Terre Haute & I.).....	480,000 00	271,893 37	751,893 37
32	Iron Range & Huron Bay.....	428,149 64	26,264 24	454,413 88
33	Lake Shore & Michigan Southern System.....	44,516,000 00		44,516,000 00
36	Detroit, Monroe & Toledo.....		924,000 00	924,000 00
38	Kalamazoo, Allegan & Grand Rapids.....	840,000 00		840,000 00
39	Kalamazoo & White Pigeon.....		400,000 00	400,000 00
40	Northern Central Michigan.....		1,525,000 00	1,525,000 00
41	Sturgis, Goshen & St. Louis.....	322,000 00		322,000 00
42	Lima Northern.....	1,200,000 00		1,200,000 00
43	Lowell & Hastings.....		38,905 00	38,905 00
44	Manistee & Grand Rapids.....			
45	Manistee & Northeastern & Supplementary.....		1,527,434 28	1,527,434 28
46	Manistique.....		88,493 38	88,493 38
47	Manistique & Northwestern.....		1,619 91	1,619 91
48	Mason & Oceana.....		50,000 00	50,000 00
49	Michigan Air Line Railway.....	1,508,686 87	47,463 68	1,556,150 55
50	Michigan Central System.....	10,000,000 00	2,522,833 98	12,522,833 98
51	Battle Creek & Sturgis.....	500,000 00		500,000 00
52	Bay City & Battle Creek.....	250,000 00		250,000 00
53	Canada Southern Bridge.....	1,000,000 00	1,702,478 89	2,702,478 89
54	Detroit & Bay City.....			
55	Detroit, Delray & Dearborn.....		42,751 98	42,751 98
56	Grand River Valley.....	1,500,000 00		1,500,000 00
57	Jackson, Lansing & Saginaw.....			
58	Kalamazoo & South Haven.....			
59	Michigan Air Line R. R.....	2,600,000 00		2,600,000 00
60	Michigan Midland & Canada.....	323,635 00	605,350 72	928,985 72
62	Toledo, Canada Southern & Detroit.....	1,511,737 50	2,467,780 00	3,979,517 50
63	Midland & Hubbard.....		3,586 25	3,586 25
64	Midland & Northern.....		8,547 29	8,547 29
65	Mineral Range.....	613,300 00	293,697 85	906,997 85
66	Minneapolis, St. Paul & Sault Ste. Marie.....	29,753,973 10	2,821,380 04	32,575,353 14
67	Munising.....	2,000 00	398,881 38	400,881 38

COMMISSIONER OF RAILROADS.

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3.—INDEBTEDNESS.—CONTINUED.

Miles of road covered by indebtedness.	Debt per mile of road.	Indebtedness previous report.	Increase during 1896.	Decrease during 1896.	Total interest on indebtedness.	Road No.
296.80	\$24,537 55	\$7,409,907 94	-----	\$78,081 91	\$280,000 00	1
20.50	16 88	5,152 13	-----	4,816 17	-----	2
105.	1,345 31	133,988 94	\$11,807 29	-----	-----	3
8.09	2,267 08	18,171 52	168 76	-----	-----	4
16.	3,111 35	49,984 45	-----	202 77	-----	5
156.	428 84	64,000 00	2,500 00	-----	2,500 00	7
59.37	30,084 92	1,788,141 46	-----	-----	61,700 00	8
326.5	52,965 15	17,076,068 67	217,058 47	-----	66,000 00	9
44.20	11,972 27	208 83	529,175 39	-----	-----	10
-----	-----	-----	-----	208 83	-----	11
6,150.75	23,521 69	145,274,876 23	-----	598,867 59	7,575,515 28	12
5,080.78	27,587 47	128,723,878 89	-----	1,528,908 67	6,390,319 49	13
581.11	14,877 79	8,527,689 41	118,005 89	-----	409,860 58	14
841.35	1,283 31	192,606 56	228,384 87	-----	15,658 45	15
53.	37,828 76	1,961,710 63	43,213 88	-----	86,250 00	16
1,804.74	33,080 40	58,136,090 85	1,475,200 51	-----	2,642,972 11	17
189.	39,168 89	7,348,248 85	53,727 28	-----	351,509 88	18
-----	-----	7,037,069 08	66,372 60	-----	-----	19
296.4	10,429 61	3,223,453 01	-----	132,097 82	116,000 00	20
571.71	48,220 17	26,667,692 41	900,280 46	-----	861,954 81	21
738.93	16,210 57	11,463,855 24	514,627 24	-----	613,823 30	22
16.30	31,901 84	520,000 00	-----	-----	26,000 00	23
434.69	23,410 74	17,176,474 89	-----	7,000,057 00	508,829 30	24
36.85	23,041 44	830,550 00	18,525 00	-----	37,500 00	25
26.	17,396 68	448,357 86	3,695 77	-----	7,500 00	26
31.19	12,824 62	400,000 00	-----	-----	16,250 00	27
39.29	19,137 01	742,478 59	9,414 78	-----	-----	28
34.	13,306 29	429,952 08	22,461 80	-----	-----	29
1,117.51	39,834 99	44,766,000 00	-----	250,000 00	3,117,745 00	30
-----	-----	-----	924,000 00	-----	-----	31
58.42	10,441 63	840,000 00	400,000 00	-----	42,000 00	32
-----	-----	1,525,000 00	-----	-----	-----	33
-----	-----	322,000 00	-----	-----	9,680 00	34
-----	-----	-----	1,200,000 00	-----	60,000 00	35
12.50	3,112 40	38,903 00	-----	-----	-----	36
-----	-----	8 38	-----	8 38	-----	37
90.50	16,877 78	1,521,310 13	6,124 15	-----	74,517 95	38
59.50	1,487 28	125,171 42	-----	36,678 04	5,414 56	39
-----	-----	-----	1,619 91	-----	-----	40
27.	1,851 85	50,000 00	-----	-----	-----	41
105.60	14,736 08	1,556,130 35	-----	-----	75,433 34	42
270.07	46,368 85	12,347,678 89	175,157 59	-----	690,000 00	43
41.	12,196 12	500,000 00	-----	-----	15,000 00	44
18.	16,666 66	250,000 00	-----	-----	7,500 00	45
-----	-----	2,611,917 79	90,561 10	-----	70,000 00	46
149.90	23,855 90	3,576,000 00	-----	3,576,000 00	178,000 00	47
4.84	8,838 08	41,816 98	986 00	-----	-----	48
83.79	17,901 77	1,500,000 00	-----	-----	90,000 00	49
-----	-----	2,054,000 00	-----	2,054,000 00	-----	50
39.50	17,721 50	700,000 00	-----	703,000 00	35,000 00	51
115.16	22,577 28	2,600,000 00	-----	-----	104,000 00	52
14.68	63,262 40	897,617 92	31,367 80	-----	22,610 00	53
58.92	67,541 03	3,874,517 50	105,000 00	-----	105,000 00	54
-----	-----	3,151 95	434 30	-----	-----	55
10.	354 72	7,613 80	983 49	-----	-----	56
17.40	52,126 31	644,381 89	262,665 96	-----	25,253 88	57
1,170.21	27,837 19	32,640,937 36	-----	65,579 21	1,196,275 31	58
25.49	15,727 01	400,881 38	-----	-----	120 00	59

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## 3.—INDEBTEDNESS.—CONTINUED.

Road No.	Railroads.	Funded.	Unfunded.	Total.
68	Pontiac, Oxford & Northern.....	\$136,000 00	\$24,221 17	\$160,221 17
69	Saginaw, Tuscola & Huron.....		1,262,335 22	1,262,335 22
72	Sault Ste. Marie Bridge Co. ....	900,000 00		900,000 00
73	South Haven & Eastern.....	216,000 00	8,577 00	224,577 00
74	St. Clair Tunnel.....	2,500,000 00	12,721 99	2,512,721 99
75	St. Joseph Valley.....	50,000 00	63,546 49	112,546 49
77	Toledo, Saginaw & Muskegon.....	1,649,000 00	691,003 54	2,340,003 54
78	Wisconsin & Michigan.....	951,000 00	347,042 56	1,298,042 56
79	Wabash.....	81,534,000 00		81,534,000 00
81	The Fort Street Union Depot Co. ....	1,000,000 00	810,894 40	1,810,894 40
ORE AND FOREST ROADS.				
1	Bear Lake & Eastern.....		8,691 71	8,691 71
4	Hecla & Torch Lake.....		690,282 84	690,282 84
5	Lake Superior & Ishpeming.....	1,200,000 00	200,454 46	1,400,454 46
7	Manistee & Luther.....		381 09	381 09
8	Quincy & Torch Lake.....	100,000 00	65,921 22	165,921 22
	Total .....	\$602,026,687 21	\$54,334,169 61	\$656,360,856 82

COMMISSIONER OF RAILROADS.

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3.—INDEBTEDNESS.—CONCLUDED.

Miles of road covered by indebtedness.	Debt per mile of road.	Indebtedness previous report.	Increase during 1896.	Decrease during 1896.	Total interest on indebtedness.	Road No.
100.	\$1,602 21	\$87,795 80	\$72,525 37	-----	\$5,256 68	66
66.57	18,962 52	1,187,196 50	75,138 72	-----	68,548 08	69
-----	-----	900,000 00	-----	-----	45,000 00	72
36.60	6,135 96	220,900 00	3,677 00	-----	7,007 33	73
2.25	1,116,765 33	2,529,792 07	-----	\$17,150 08	123,000 00	74
10.	11,254 64	110,046 49	2,500 00	-----	2,500 00	75
96.	24,375 04	2,309,968 35	30,085 19	-----	82,450 00	77
68.55	20,425 53	911,096 40	386,946 16	-----	49,025 00	78
1,695.2	48,100 00	84,890,805 44	-----	8,356,805 44	2,729,545 00	79
-----	-----	1,308,694 40	2,000 00	-----	45,000 00	81
18.	482 87	10,513 41	-----	1,821 70	-----	1
7.5	92,037 70	586,230 12	104,052 72	-----	-----	4
20.5	68,753 88	-----	1,409,454 46	-----	42,603 29	5
63.	6 09	631 52	-----	250 43	-----	7
6.	27,653 54	165,798 22	128 00	-----	-----	8
23,068.71	\$28,427 77	\$665,862,167 09	\$9,900,218 27	\$19,401,528 54	\$29,759,806 09	

4.—COST OF PROPERTY COMPARED WITH STOCK AND DEBT.

Road number.	Railroads.	Total reported cost of property.	Cost per mile of road.	Proportion of cost for Michigan.
1	Ann Arbor.....	\$14,386,867 88	\$47,358 59	\$14,052,715 84
2	Arcadia & Betsay River.....	188,119 72	5,413 59	188,119 72
3	Au Sable & Northwestern.....	243,796 06	2,257 37	243,796 06
4	Bay City Belt Line.....	113,059 37	13,975 20	113,059 37
5	Boysie City & Southeastern.....	85,282 62	5,830 16	85,282 62
6	Buchanan & St. Joseph.....	5,000 00		5,000 00
7	Central Michigan.....			
8	Chicago, Detroit & C. G. T. Junction.....	2,765,126 13	46,574 46	2,765,126 18
9	Chicago & Grand Trunk.....	19,580,204 49	59,908 74	18,419,558 50
10	Chicago, Kalamazoo & Saginaw.....	902,514 40	20,418 87	902,514 40
11	Chicago & Kalamazoo Terminal.....	4,208 83		4,208 83
12	Chicago, Milwaukee & St. Paul.....	212,453,124 01	34,541 01	5,311,323 10
13	Chicago & Northwestern.....	174,806,916 91	35,167 44	18,228,919 40
14	Chicago & West Michigan.....	12,610,945 73	25,315 00	11,721,160 13
15	Chicago & North Michigan.....	1,809,880 04	19,542 88	1,809,880 04
15½	Jackson & Cincinnati.....			
16	Cincinnati, Jackson & Mackinaw.....	20,152,421 88		9,636,989 91
17	Cincinnati, Saginaw & Mackinaw.....	3,228,827 58	60,921 28	3,228,827 58
18	Cleveland, Cincinnati, Chicago & St. Louis.....	85,861,368 27	47,575 47	1,671,720 84
19	Detroit, Grand Haven & Milwaukee.....	7,065,492 33	37,393 56	7,065,492 33
20	Detroit, Lansing & Northern System.....	7,760,409 93	35,024 64	7,760,409 93
21	Grand Rapids, Lansing & Detroit.....	1,303,636 27	23,472 02	1,303,636 27
22	Saginaw & Western.....	568,586 65	13,356 51	568,586 65
23	Detroit & Mackinac.....	4,978,152 65	16,795 39	4,978,152 65
24	Duluth, South Shore & Atlantic.....	44,856,063 58	78,459 47	36,497,776 24
25	Flint & Pere Marquette.....	21,405,784 05	28,978 82	21,405,784 05
26	Gogebic & Montreal Riv. (Op'd by Wis. Cent.).....	1,120,000 00	68,711 66	1,120,000 00
27	Grand Rapids & Indiana System.....	15,056,700 00	34,637 79	13,877,612 52
28	Muskegon, Grand Rapids & Indiana.....	746,978 21	20,270 78	746,978 21
29	Traverse City.....	646,268 15	24,856 47	646,268 15
30	Hancock & Calumet.....	870,435 74	27,907 53	870,435 74
31	Indiana & Lake Mich. (Op'd by Terre Haute & I.).....	1,431,038 44	36,422 46	908,709 41
32	Iron Range & Huron Bay.....	1,187,875 95	34,937 53	1,187,875 95
33	Lake Shore & Michigan Southern System.....	84,000,000 00	96,298 50	18,312,517 06
34	Detroit & Chicago.....	5,176,557 58	78,576 29	4,789,416 54
35	Detroit, Hillsdale & Southwestern.....	1,345,716 25	20,639 82	1,345,716 25
36	Detroit, Monroe & Toledo.....	1,381,600 00	22,155 22	1,196,381 88
37	Fort Wayne & Jackson.....	2,719,579 53		1,238,168 79
38	Kalamazoo, Allegan & Grand Rapids.....	1,450,000 00	24,820 00	1,450,000 00
39	Kalamazoo & White Pigeon.....	610,000 00	16,680 00	610,000 00
40	Northern Central Michigan.....	1,357,000 00	22,193 00	1,357,000 00
41	Sturgis, Goshen & St. Louis.....			
42	Lima Northern.....			
43	Lowell & Hastings.....	228,025 00	18,322 00	228,025 00
44	Manistee & Grand Rapids.....	504,470 11	11,283 16	504,470 11
45	Manistee & Northeastern and Supplementary.....	1,774,977 19	19,613 00	1,774,977 19
46	Manistique.....	471,222 83	7,919 71	471,222 83
47	Manistique & Northwestern.....			
48	Mason & Oceana.....	195,000 00	7,222 22	195,000 00
49	Michigan Air Line Railway.....	1,818,097 33	17,216 83	1,818,097 33
50	Michigan Central System.....	31,116,257 09	115,215 53	25,462,632 13
51	Battle Creek & Sturgis.....	1,009,802 34	24,620 54	1,009,802 34
52	Bay City & Battle Creek.....	557,502 84	30,972 35	557,502 84
53	Canada Southern Bridge.....	1,780,977 05	486,805 75	1,780,977 05
54	Detroit & Bay City.....	3,744,297 78	34,378 88	3,744,297 78
55	Detroit, Delray & Dearborn.....	46,251 98	9,556 19	46,251 98
56	Grand River Valley.....	2,867,053 00	34,229 17	2,867,053 00
57	Jackson, Lansing & Saginaw.....	8,309,530 16	25,164 84	8,309,530 16
58	Kalamazoo & South Haven.....	1,141,010 24	28,522 75	1,141,010 24
59	Michigan Air Line R. R.....	3,154,287 15	27,390 30	2,987,881 73
60	Michigan, Midland & Canada.....	586,342 02	39,941 56	586,342 02
61	Saginaw Bay & Northwestern.....	402,285 15	13,871 21	402,285 15
62	Toledo, Canada Southern & Detroit.....	3,123,886 77	53,019 10	2,506,212 86

COMMISSIONER OF RAILROADS.

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4.—COST OF PROPERTY COMPARED WITH STOCK AND DEBT.—CONTINUED.

Proportion of cost for Michigan previous year.	Increased cost, 1896.	Decreased cost, 1896.	Total stock and debt.	Stock and debt per mile of road.	Excess of stock and debt over reported cost per mile of road.	Excess of reported cost over stock and debt per mile of road.	Road number.
\$14,169,008 95		\$116,288 11	\$14,581,826 03	\$48,801 80	\$1,442 71		1
123,507 01	\$14,612 71		140,883 96	6,845 65	1,432 06		2
238,225 15	5,570 98		186,794 23	1,729 58		\$527 79	3
112,890 61	168 76		118,340 28	14,627 98	652 78		4
78,226 56	7,056 06		99,781 68	6,236 36	906 19		5
5,000 00							6
2,765,126 13			704,500 00	4,591 92			7
18,379,424 93	40,133 45		2,765,126 13	46,574 47	13,200 81		8
	902,514 40		23,893,122 14	73,179 55	1,784 40		9
			979,175 89	22,153 27			10
4,203 83							11
5,233,342 56	27,985 54		217,969,169 64	34,449 97		91 04	12
19,289,938 30		\$61,033 90	203,578,790 75	40,942 33	5,774 89		13
11,661,557 26	59,802 87		16,157,496 30	27,204 34	1,988 74		14
1,809,519 04	361 00						15
			460,060 00	26,062 32			16
9,636,969 91			16,701,826 43	107,753 71			17
3,218,419 26	10,406 32		8,504,924 51	66,180 65	5,209 37		18
1,579,563 00	92,157 84		98,027,623 81	54,317 08	6,741 56		19
7,057,267 22	8,225 11		8,901,976 11	47,100 40	9,716 84		20
7,760,409 98			8,943,074 60	40,357 78	5,333 14		21
1,308,636 27			1,308,636 27	23,472 02			22
568,586 65			570,500 00	13,401 46	44 95		23
4,469,198 97	508,958 68		5,136,355 69	17,329 07	533 63		24
36,818,843 94	178,932 80		49,567,952 87	86,701 22	8,241 75		25
21,378,894 97	26,889 08		21,978,482 45	29,743 66	764 84		26
1,120,000 00			1,120,000 00	68,711 66			27
15,276,450 57		1,896,888 05	15,746,117 89	36,223 78	1,585 99		28
746,978 21			850,075 00	23,068 52	2,797 74		29
646,268 15			657,053 63	25,271 80	414 83		30
849,878 06	20,562 68		750,000 00	24,046 17		8,861 86	31
1,096,449 62		157,740 21	1,551,883 37	39,493 43	3,075 96		32
1,187,875 95			1,266,413 88	37,247 46	2,309 98		33
18,312,517 66			94,516,000 00	98,346 00	47 50		34
4,818,712 07		29,235 53	1,000,000 00	16,048 50		60,527 79	35
1,345,716 25			1,350,000 00	20,705 52	65 70		36
1,196,381 88			1,338,100 00	21,457 66		697 56	37
1,238,168 79			2,727,548 00				38
1,450,000 00			1,450,000 00	24,820 00			39
610,000 00			680,900 00	17,251 56	571 56		40
1,357,000 00			2,125,000 00	24,942 75	2,747 75		41
			322,000 00	11,886 00			42
228,025 00			1,200,000 00				43
438,818 39	65,651 72		228,025 00	18,322 00			44
			450,000 00	10,067 10		1,216 06	45
1,768,959 24	6,017 95		2,053,200 25	22,687 29	3,074 29		46
470,908 15	314 65		238,483 38	4,008 29		3,911 42	47
			106,619 61				48
195,000 00			200,000 00	7,407 50	185 25		49
1,818,097 83			1,856,130 35	17,576 99	360 16		50
25,462,632 13			31,260,883 98	115,750 86	535 33		51
1,009,271 75	330 59		1,000,000 00	24,390 24		230 30	52
550,330 59	7,171 75		550,000 00	30,558 54		416 81	53
1,780,977 05			8,152,478 89	861,333 03	374,727 25		54
3,744,297 78			2,000,000 00	13,342 23		21,036 66	55
45,316 98	935 00		46,251 98	9,556 19			56
2,367,053 00			1,991,200 00	23,762 27		10,466 90	57
8,195,811 64	113,718 52		2,000,000 00				58
1,141,010 24			325,400 00	25,647 50		2,875 25	59
2,967,881 73			2,600,000 00	28,558 21		3,537 09	60
586,342 02			1,228,985 72	88,718 37	43,776 81		61
225,526 15	176,739 00		20,000 00	240 83		13,620 28	62
2,506,212 86			5,527,160 00	98,808 21	40,789 11		63

## 4.—COST OF PROPERTY COMPARED WITH STOCK AND DEBT.—CONTINUED.

Road number.	Railroads.	Total reported cost of property.	Cost per mile of road.	Proportion of cost for Michigan.
63	Midland & Hubbard.....	\$15,586 25	\$1,558 62	\$15,586 25
64	Midland & Northern.....	8,675 49	867 55	8,675 49
65	Mineral Range.....	779,266 91	44,785 45	779,266 91
66	Minneapolis, St. Paul & Sault Ste. Marie.....	50,813,481 13	43,422 53	8,713,952 81
67	Munising.....	424,422 88	16,650 56	424,422 88
68	Pontiac, Oxford & Northern.....	1,013,185 28	10,131 85	1,013,185 28
69	Saginaw, Tuscola & Huron.....	980,462 76	14,728 29	980,462 76
70	Saginaw Valley & St. Louis System.....	690,053 16	19,438 12	690,053 16
71	Saginaw & Grand Rapids.....	70,000 00	17,444 44	70,000 00
72	Sault Ste. Marie Bridge Co.....	1,900,000 00	1,557,376 23	580,455 44
73	South Haven & Eastern.....	439,558 19	12,009 79	439,558 19
74	St. Clair Tunnel.....	3,223,170 61	1,432,520 27	1,611,585 80
75	St. Joseph Valley.....	412,546 49	41,254 64	412,546 49
76	Superior Terminal.....			
77	Toledo, Saginaw & Muskegon.....	3,249,365 50	33,847 56	3,249,365 50
78	Wisconsin & Michigan.....	2,024,560 00	31,826 28	979,077 22
79	Wabash.....	133,433,500 00	80,772 33	6,138,697 08
80	Detroit Union R. R. Depot & Station Co.....	2,364,558 36		2,364,558 36
81	The Fort St. Union Depot Co.....	2,308,649 83		2,308,649 83
ORE AND FOREST ROADS.				
1	Bear Lake & Eastern.....	125,491 92	6,971 77	125,491 92
2	Crawford & Manistee River.....	57,184 76	5,718 47	57,184 76
3	Dead River.....	51,010 96	17,117 77	51,010 96
4	Hecia & Torch Lake.....	790,282 84	105,863 77	790,282 84
5	Lake Superior & Ishpeming.....	2,214,036 60	108,001 79	2,214,036 60
6	Lewiston & Southeastern.....	24,781 82	2,478 18	24,781 82
7	Manistee & Luther.....	365,633 89	5,803 71	365,633 89
8	Quincy & Torch Lake.....	228,913 73	38,152 29	228,913 73
	Total.....	\$1,026,961,967 64	\$45,238 60	\$303,185,907 94



## 4.—COST OF PROPERTY COMPARED WITH STOCK AND DEBT.—CONCLUDED.

Proportion of cost for Michigan previous year.	Increased cost, 1896.	Decreased cost, 1896.	Total stock and debt.	Stock and debt per mile of road.	Excess of stock and debt over reported cost per mile of road.	Excess of reported cost over stock and debt per mile of road.	Road number.
\$15,151 95	\$434 30		\$15,586 25	\$1,558 62			63
8,675 49			11,047 29	1,104 75	\$237 20		64
778,894 69	872 22		1,300,397 85	74,735 51	29,950 06		65
8,620,928 81	98,023 50		53,575,358 14	45,782 68	2,360 15		66
	424,422 88		1,270,881 38	49,858 03	33,207 47		67
1,012,689 84	495 44		1,160,221 17	11,602 21	1,470 36		68
958,830 22	21,632 54		1,385,890 60	20,818 54	6,090 25		69
690,053 16			920,135 09	25,919 30	6,481 18		70
70,000 00			70,000 00	19,444 44			71
580,455 44			1,900,000 00	1,557,376 23			72
439,588 19			443,077 00	12,105 92	96 13		73
1,611,651 36		\$66 06	2,862,721 99	1,272,320 88		\$160,199 39	74
365,989 42	46,557 07		412,546 49	41,254 64			75
			61,200 00				76
3,249,395 50			3,940,003 54	41,041 70	7,194 14		77
936,550 00	43,527 22		2,249,542 56	35,397 99	3,571 71		78
6,138,697 08			133,534,000 00	80,722 00		50 83	79
2,290,951 82	83,608 54		2,250,000 00				80
2,804,911 31	3,738 54		2,310,694 40				81
125,491 92			113,855 71	6,297 53		674 24	1
57,184 76			50,000 00	5,000 00		718 47	2
51,010 96			52,010 96	8,389 26		8,728 51	3
686,230 12	104,062 72		790,282 84	106,363 77			4
	2,214,036 60		2,409,454 46	117,534 36	9,532 57		5
	24,781 82		60,000 00	6,000 00	3,521 82		6
355,441 26	10,192 63		300,381 09	4,767 99		1,035 72	7
228,785 43	128 30		215,921 22	35,986 85		2,165 44	8
\$301,008,148 54	\$5,346,021 26	\$3,163,261 86	\$1,093,271,421 58	\$47,482 60			

## 5.—GROSS INCOME—ENTIRE SYSTEM.

Road No.	Railroads.	Traffic earnings.	Operating receipts other than for traffic earnings.	Total receipts from operation.
1	Ann Arbor.....	\$1,125,215 46	\$45,534 89	\$1,170,750 35
2	Arcadia & Betsey River.....	6,022 84	-----	6,022 84
3	An Sable & Northwestern.....	59,385 09	-----	59,385 09
4	Bay City Belt Line (Op'd by F. & P. M.).....	-----	-----	-----
5	Boysie City & Southeastern.....	19,205 35	-----	19,205 35
8	Chicago, Detroit & C. G. T. Junction.....	233,513 91	-----	233,513 91
9	Chicago & Grand Trunk.....	3,345,961 27	2,556 73	3,348,518 00
10	Chicago, Kalamazoo & Saginaw.....	52,110 51	-----	52,110 51
12	Chicago, Milwaukee & St. Paul.....	31,122,303 76	230,065 91	31,352,369 67
13	Chicago & Northwestern.....	31,827,579 18	349,573 63	32,177,152 81
14	Chicago & West Michigan.....	-----	-----	-----
15	Chicago & North Michigan.....	1,641,323 34	1,293 76	1,642,617 10
16	Cincinnati, Jackson & Mackinaw.....	699,084 70	8,001 66	707,086 36
17	Cincinnati, Saginaw & Mackinaw.....	123,377 62	477 73	123,855 35
18	Cleveland, Cincinnati, Chicago & St. Louis.....	12,745,489 66	265,972 96	13,011,462 62
19	Detroit, Grand Haven & Milwaukee.....	921,807 95	56,013 02	977,820 97
20	Detroit, Lansing & Northern System.....	1,151,423 30	14,361 66	1,165,784 96
23	Detroit & Mackinac.....	398,448 01	-----	398,448 01
24	Duluth, South Shore & Atlantic.....	1,872,982 56	32,827 97	1,905,810 53
25	Flint & Pere Marquette.....	2,118,798 12	-----	2,118,798 12
26	Gogebic & Montreal Riv. (Op'd by Wis. Cent.).....	46,662 00	41 80	46,703 80
27	Grand Rapids & Indiana System.....	2,045,802 35	19,812 24	2,065,614 59
30	Hancock & Calumet.....	177,630 93	457 50	178,088 43
31	Indianapolis & Lake Mich. (Op'd by Terre H. & I.).....	66,970 11	-----	66,970 11
33	Lake Shore & Michigan Southern System.....	19,871,832 00	322,125 54	20,193,957 54
42	Lima Northern.....	29,878 13	-----	29,878 13
43	Lowell & Hastings.....	11,139 51	-----	11,139 51
44	Manistee & Grand Rapids.....	34,875 03	174 84	35,049 89
45	Manistee & Northeastern and Supplementary.....	200,289 40	1,065 63	201,355 03
46	Manistique.....	116,563 28	150 00	116,713 28
48	Mason & Oceana.....	14,346 81	-----	14,346 81
49	Michigan Air Line Railway.....	147,441 11	1,000 00	148,441 11
50	Michigan Central System.....	13,765,987 89	55,627 05	13,821,614 44
64	Midland & Northern.....	886 99	-----	886 99
65	Mineral Range.....	106,127 74	107 82	106,235 56
66	Minneapolis, St. Paul & Sault Ste. Marie.....	3,664,771 40	23,272 40	3,688,043 80
67	Munising.....	35,763 99	118 25	35,912 24
68	Pontiac, Oxford & Northern.....	119,536 53	156 00	119,692 53
69	Saginaw, Tuscola & Huron.....	110,083 53	619 98	110,703 49
70	Saginaw Valley & St. Louis System.....	21,519 24	65 57	21,584 81
72	Sault Ste. Marie Bridge Co.....	63,065 30	-----	63,065 30
73	South Haven & Eastern.....	27,304 34	481 74	27,786 08
74	St. Clair Tunnel.....	233,152 50	1 00	233,153 50
77	Toledo, Saginaw & Muskegon.....	88,121 54	6,625 37	94,746 91
78	Wisconsin & Michigan.....	109,021 06	-----	109,021 06
79	Wabash.....	11,963,308 39	194,817 56	12,158,125 95
80	Detroit Union R. R. Depot & Station Co.....	112,099 19	-----	112,099 19
81	The Fort St. Union Depot Co.....	126,149 22	-----	126,149 22
ORE AND FOREST ROADS.				
1	Bear Lake & Eastern.....	7,395 28	-----	7,395 28
2	Crawford & Manistee River.....	7,687 52	-----	7,687 52
4	Hecla & Torch Lake.....	104,052 92	-----	104,052 92
5	Lake Superior & Ishpeming.....	80,900 25	-----	80,900 25
6	Lewistown & Southeastern.....	2,384 70	-----	2,384 70
7	Manistee & Luther.....	51,392 13	-----	51,392 13
8	Quincy & Torch Lake.....	28,446 85	-----	28,446 85
Total.....		\$143,063,671 31	\$1,633,440 19	\$144,697,111 50

COMMISSIONER OF RAILROADS.

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5.—GROSS INCOME—ENTIRE SYSTEM.—CONCLUDED.

Income from sources other than operating.	Total income, 1896.	Proportion for Michigan.	Proportion for Michigan, 1895.	Increase of income 1896.	Decrease of income, 1896.	Road No.
	\$1,170,750 35	\$1,026,167 27	\$993,070 19	\$33,087 08		1
	6,022 84	6,022 84	980 33	5,062 51		2
	59,385 09	59,385 09	52,286 21	7,098 88		3
	19,203 35	19,203 35	17,901 29	1,304 06		4
						5
\$2,840 84	236,354 75	236,354 75	237,699 77		\$51,345 02	8
	3,848,518 00	2,166,855 26	1,989,525 15	226,830 11		9
	52,110 51	52,110 51	49,307 43	2,803 08		10
302,577 67	31,654,967 84	238,865 72	258,642 29		19,776 57	12
	32,177,152 81	2,095,894 60	2,327,839 80		234,195 20	13
						14
	1,642,617 10	1,585,451 13	1,612,536 54		77,085 41	15
	707,096 36	320,081 03	316,544 80	3,536 23		16
	128,855 35	128,355 35	135,732 90		6,877 55	17
	13,011,462 62	131,064 72	133,377 03		2,312 31	18
						19
	977,820 97	977,820 97	1,013,820 62		35,499 65	20
2,274 55	1,168,058 51	1,165,784 96	1,149,654 89	16,180 07		21
	398,448 01	398,448 01	384,394 33	34,053 68		22
32,402 20	1,938,212 73	1,741,171 49	1,628,075 69	113,095 80		24
123,559 59	2,247,357 71	2,245,385 99	2,134,936 08	110,449 91		25
						26
	46,704 80	46,704 80	52,809 91		6,105 11	27
	2,065,614 59	1,775,098 17	1,913,201 55		138,103 38	28
	178,088 43	178,088 43	194,199 63		16,111 20	30
	66,970 11	43,288 48	41,741 81	1,547 17		31
354,811 77	20,548,769 81	2,048,882 24	2,254,253 23		205,870 99	33
						42
	29,878 18	2,321 35		2,321 35		43
	11,139 51	11,139 51	10,647 04	492 47		44
	35,049 89	35,049 89	37,837 72		2,787 83	45
	201,875 03	201,875 03	205,652 05		4,277 02	46
	116,713 28	116,713 28	117,228 07		514 79	48
						49
	14,346 81	14,346 81	18,695 91		4,349 10	50
94 00	148,535 11	148,535 11	175,458 58		26,948 47	51
39,686 34	13,861,299 78	7,506,208 64	7,542,893 69		34,685 05	52
	896 99	896 99	1,468 33		581 34	53
12,500 00	120,735 56	120,735 56	113,569 19	7,166 37		54
						55
30,862 33	3,718,906 13	780,889 85	606,329 78	174,540 67		56
	35,902 24	35,902 24		35,902 24		57
	119,692 53	119,692 53	110,215 85	9,476 68		58
842 82	111,546 81	111,546 81	114,170 99		2,624 68	59
	21,584 81	21,584 81	84,087 72		62,472 91	60
						72
	68,085 30	18,667 20	17,754 58	912 62		73
	27,788 08	27,788 08	19,642 47	8,145 61		74
	233,153 50	116,576 75	103,659 25	12,917 50		75
	94,746 91	94,746 91	94,968 78		221 87	76
						78
	109,021 06	34,113 22	41,232 56		7,119 34	79
	12,158,125 95	347,806 67	450,524 12		102,717 45	80
	112,099 19	112,099 19	149,584 33		37,485 14	81
	126,149 22	126,149 22	123,474 31	2,674 91		
						1
	7,395 28	7,395 28	7,305 10	90 18		2
	7,687 52	7,687 52	5,876 48	1,811 04		3
	104,052 92	104,052 92	84,493 56	19,559 36		4
	80,900 25	80,900 25		80,900 25		5
	2,384 70	2,384 70		2,384 70		6
	51,392 13	51,392 13	74,905 99		23,413 86	7
	28,446 85	28,446 85	25,382 66	3,064 19		8
\$907,451 11	\$145,604,563 61	\$29,022,999 96	\$29,209,114 48	\$917,366 72	\$1,103,481 24	

## 6.—EXPENSES.

Road No.	Railroads.	Maintenance of way and structures.	Maintenance of equipment.	Conducting transportation.
1	Ann Arbor.....	\$481,648 81	\$180,626 25	\$441,352 95
2	Arcadia & Betsey River.....	412 54	563 47	1,853 83
3	Au Sable & Northwestern.....	10,380 26	16,086 13	40,608 63
5	Boyer City & Southeastern.....	1,573 56	2,724 81	6,859 45
8	Chicago, Detroit & C. G. T. Junction.....	36,747 10	72,758 10	163,929 73
9	Chicago & Grand Trunk.....	411,394 88	470,441 86	1,971,899 24
10	Chicago, Kalamazoo & Saginaw.....	6,480 53	3,163 28	18,459 29
12	Chicago, Milwaukee & St. Paul.....	4,804,735 66	2,707,708 64	9,656,403 24
13	Chicago & Northwestern.....	4,309,882 72	3,593,850 22	11,496,638 88
14	Chicago & West Michigan.....	366,834 58	189,976 70	667,590 78
15	Chicago & North Michigan.....			
16	Cincinnati, Jackson & Mackinaw.....	140,237 33	103,597 64	332,348 64
17	Cincinnati, Saginaw & Mackinaw.....	30,742 50	19,103 60	68,299 08
18	Cleveland, Cincinnati, Chicago & St. Louis.....	1,746,751 60	1,539,091 33	5,738,985 51
19	Detroit, Grand Haven & Milwaukee.....	185,894 54	134,141 52	528,018 67
20	Detroit, Lansing & Northern System.....	257,520 10	145,571 37	503,016 37
23	Detroit & Mackinac.....	82,206 71	36,088 92	126,601 81
24	Duluth, South Shore & Atlantic.....	305,226 22	153,413 87	714,218 61
25	Flint & Pere Marquette.....	827,593 03	214,809 04	921,499 71
26	Gogebic & Montreal River (Op'd by Wis. Cent.).....	9,757 94	5,860 05	22,018 58
27	Grand Rapids & Indiana System.....	383,184 20	337,928 89	877,899 87
30	Hancock & Calumet.....	17,564 22	16,242 02	67,061 00
31	Indiana & Lake Mich. (Op'd by Terre Haute & I.).....	16,054 42	5,638 76	51,188 02
33	Lake Shore & Michigan Southern System.....	2,209,142 69	2,767,409 69	7,664,427 18
43	Lowell & Hastings.....	2,927 58	766 31	6,695 25
44	Manistee & Grand Rapids.....	9,115 39	3,414 87	8,493 97
45	Manistee & Northeastern and Supplementary.....	27,909 46	16,428 46	64,212 40
46	Manistique.....	23,706 99	13,131 50	34,072 11
48	Mason & Oceana.....	1,700 00	3,600 00	8,672 89
49	Michigan Air Line Railway.....	54,652 07	11,127 64	70,525 84
50	Michigan Central System.....	1,922,546 96	1,542,384 55	6,281,472 73
64	Midland & Northern.....	9,712 76	7,583 96	1,820 48
65	Mineral Range.....			33,112 92
66	Minneapolis, St. Paul & Sault Ste. Marie.....	384,586 96	419,372 69	1,265,006 01
67	Munising.....	2,303 28	1,066 97	12,897 13
68	Pontiac, Oxford & Northern.....	25,570 92	6,943 20	38,485 80
69	Saginaw, Tuscola & Huron.....	25,953 88	14,312 41	38,449 82
70	Saginaw Valley & St. Louis System.....	3,814 53	988 42	10,601 32
72	Sault Ste. Marie Bridge Co.....	12,174 22	5,504 35	11,333 93
73	South Haven & Eastern.....			25,344 92
74	St. Clair Tunnel.....	5,483 84	51,400 73	25,844 92
77	Toledo, Saginaw & Muskegon.....	48,693 87	16,693 09	62,427 10
78	Wisconsin & Michigan.....	16,594 25	10,285 90	46,161 81
79	Wabash.....	1,817,290 35	1,649,973 39	5,361,845 40
80	Detroit Union R. R. Depot & Station Co.....			
81	The Fort St. Union Depot Co.....			
ORE AND FOREST ROADS.				
1	Bear Lake & Eastern.....	1,820 49	613 69	2,518 30
2	Crawford & Manistee River.....	3,574 14	1,242 85	2,675 75
4	Hecla & Torch Lake.....	17,573 52	1,497 70	83,849 46
5	Lake Superior & Ishpeming.....	4,050 10		23,414 32
6	Lewiston & Southeastern.....	5,575 97	205 85	1,509 88
7	Manistee & Luther.....	9,932 94	8,983 38	14,396 88
8	Quincy & Torch Lake.....	7,654 66	4,278 94	15,901 77
Total.....		\$20,587,190 27	\$16,508,586 41	\$55,611,597 18

COMMISSIONER OF RAILROADS.

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6.—EXPENSES.—CONCLUDED.

General expenses including taxes.	Total expenses including taxes.	Proportion of expenses and taxes for Michigan.	Same for Michigan previous year.	Increase, 1896.	Decrease, 1896.	Road No.
\$79,831 86	\$1,183,459 87	\$1,180,027 36	\$1,048,627 27	\$111,400 09		1
207 44	3,043 28	3,043 28	624 87	2,418 91		2
3,759 46	70,834 48	70,834 48	92,067 13		\$21,232 65	3
400 77	11,558 59	11,558 59	10,749 25	809 34		4
15,386 97	288,821 90	288,821 90	315,067 35		26,245 45	5
263,159 48	3,116,894 96	2,013,748 66	1,835,877 28	177,871 37		6
6,333 46	34,436 56	34,436 56	32,539 99	1,896 57		7
2,296,239 84	19,465,087 88	191,921 94	226,274 86		34,352 92	8
1,826,532 98	21,226,924 80	2,199,114 44	2,046,498 51	152,615 93		9
97,078 82	1,321,475 88	1,243,091 68	1,320,067 43		76,965 75	10
60,784 96	636,968 57	288,340 38	285,861 56	2,478 82		11
6,101 91	124,247 06	124,247 06	131,912 50		7,665 44	12
1,034,970 16	10,079,798 60	112,000 49	110,450 75	1,549 74		13
55,522 68	903,577 41	903,577 41	931,172 27		27,594 86	14
79,472 33	990,590 17	990,590 17	893,351 52	95,228 65		15
36,204 79	281,102 23	281,102 23	259,158 42	21,943 81		16
100,253 44	1,273,142 14	1,108,574 90	1,027,014 15	79,560 75		17
124,996 33	1,689,198 11	1,587,719 23	1,607,377 06		19,657 83	18
4,981 22	42,617 79	42,617 79	53,074 99		10,457 20	19
124,098 58	1,723,111 54	1,522,891 47	1,601,403 72		78,512 25	20
11,232 75	112,099 99	112,099 99	105,898 40	6,201 59		21
1,426 73	74,307 93	47,376 27	48,403 72		1,027 45	22
1,085,175 16	13,728,154 67	1,876,836 37	2,024,982 58		148,144 21	23
275 35	10,664 49	10,664 49	11,701 73		1,037 24	24
4,180 56	25,154 79	25,154 79	18,631 94	6,522 85		25
15,806 01	124,856 83	124,356 33	135,125 77		10,769 44	26
2,933 98	73,844 58	73,844 58	67,689 22	6,155 36		27
373 92	14,346 81	14,346 81	18,696 91		4,349 10	28
4,747 87	141,032 92	141,032 92	151,797 74		10,764 82	29
645,945 66	10,392,349 90	6,151,934 64	6,027,177 71	124,756 93		30
	1,820 43	1,820 48	1,862 95		42 47	31
9,413 32	59,822 96	59,822 96	60,036 13		233 17	32
222,226 77	2,291,191 83	556,218 41	425,536 41	30,680 00		33
2,003 04	18,280 42	18,280 42		18,280 42		34
10,181 29	81,181 21	81,181 21	73,060 83	8,120 38		35
12,850 83	91,566 44	91,566 44	89,246 70	2,319 74		36
1,360 78	16,765 05	16,765 05	66,009 64		49,244 59	37
11,891 22	11,891 22	3,519 90	2,811 42	708 48		38
3,735 96	32,748 46	32,748 46	15,906 44	16,842 02		39
8,853 93	91,063 42	45,541 71	43,957 60	1,584 11		40
4,632 82	132,446 88	132,446 88	113,420 21	19,026 67		41
13,105 27	86,147 23	26,705 64	22,948 19	3,757 45		42
742,825 66	9,571,434 80	292,694 84	402,024 48		109,329 64	43
26,884 29	26,884 29	26,884 29	27,900 52		2,016 23	44
8,343 84	8,343 84	8,343 84	8,583 38		239 54	45
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						99
						100
\$9,006,416 27	\$101,808,790 13	\$24,269,427 60	\$23,981,055 55	\$935,480 33	\$667,108 28	

## 7.—GENERAL EXHIBIT.—REVENUE AND DISBURSEMENTS.

Road No.	Railroads.	Total revenue from operation.	Total operating expenses in- cluding taxes	Net result fr'm
				Surplus.
1	Ann Arbor.....	\$1,170,750 35	\$1,183,459 87	-----
2	Arcadia & Betsey River.....	6,022 84	3,043 28	\$2,979 56
3	Au Sable & Northwestern.....	59,385 09	70,384 48	-----
5	Boyme City & Southeastern.....	19,205 35	11,558 59	7,646 76
8	Chicago, Detroit & C. G. T. Junction.....	283,513 91	288,821 90	-----
9	Chicago & Grand Trunk.....	3,843,518 00	3,116,894 96	231,623 04
10	Chicago, Kalamazoo & Saginaw.....	52,110 51	34,496 56	17,673 95
11	Chicago & Kalamazoo Terminal.....	-----	-----	-----
12	Chicago, Milwaukee & St. Paul.....	31,353,389 67	19,465,087 88	11,887,302 29
13	Chicago & Northwestern.....	32,177,152 81	21,226,924 80	10,950,228 01
14	Chicago & West Michigan.....	1,642,617 10	1,321,475 88	321,141 22
15	Chicago & North Michigan.....	-----	-----	-----
16	Cincinnati, Jackson & Mackinaw.....	707,086 36	636,968 57	70,117 79
17	Cincinnati, Saginaw & Mackinaw.....	128,855 35	124,247 06	4,608 29
18	Cleveland, Cincinnati, Chicago & St. Louis.....	13,011,462 62	10,079,798 60	2,931,664 02
19	Detroit, Grand Haven & Milwaukee.....	977,820 97	903,577 41	74,243 56
20	Detroit, Lansing & Northern System.....	1,187,369 77	1,007,345 22	180,024 55
23	Detroit & Mackinac.....	400,622 86	291,102 23	119,520 63
24	Duluth, South Shore & Atlantic.....	1,905,810 53	1,273,142 14	632,668 39
25	Flint & Pere Marquette.....	2,118,798 12	1,569,198 11	529,600 01
26	Gogebic & Montreal River (Op'd by Wis. Cent.).....	46,704 80	43,617 79	4,087 01
27	Grand Rapids & Indiana System.....	2,065,614 59	1,728,111 54	342,503 05
30	Hancock & Calumet.....	178,088 43	112,099 99	65,988 44
31	Indiana & Lake Mich. (Op'd by Terre Haute & I.).....	66,970 11	74,807 83	-----
33	Lake Shore & Michigan Southern System.....	20,193,967 54	13,726,154 67	6,467,802 87
43	Lowell & Hastings.....	11,139 51	10,664 49	475 02
44	Manistee & Grand Rapids.....	35,049 89	25,154 79	9,895 10
45	Manistee & Northeastern & Supplementary.....	201,375 03	124,356 33	77,018 70
46	Manistique.....	116,713 28	73,844 58	42,868 70
48	Mason & Oceana.....	14,346 81	14,346 81	-----
49	Michigan Air Line Railway.....	148,441 11	141,032 92	7,388 19
50	Michigan Central System.....	13,821,614 44	10,392,349 90	3,429,264 54
64	Midland & Northern.....	886 99	1,820 48	-----
65	Mineral Range.....	108,235 56	59,822 96	48,412 60
66	Minneapolis, St. Paul & Sault Ste. Marie.....	3,688,043 80	2,291,191 83	1,396,851 97
67	Munising.....	35,902 24	18,760 42	17,141 82
68	Pontiac, Oxford & Northern.....	119,692 53	81,181 21	38,511 32
69	Saginaw, Tuscola & Huron.....	110,703 49	91,566 44	19,137 05
72	Sault Ste. Marie Bridge Co.....	63,085 80	11,891 22	51,194 08
73	South Haven & Eastern.....	27,786 08	22,748 46	-----
74	St. Clair Tunnel.....	238,153 50	91,083 42	142,070 08
77	Toledo, Saginaw & Muskegon.....	94,746 91	132,446 88	-----
78	Wisconsin & Michigan.....	109,021 06	86,147 23	22,873 83
79	Wabash.....	12,158,125 95	9,571,434 80	2,586,691 15
80	Detroit Union R. R. Depot & Station Co.....	112,099 19	25,884 29	86,214 90
81	The Fort Street Union Depot Co.....	126,149 22	8,843 84	117,305 38
ORE AND FOREST ROADS.				
1	Bear Lake & Eastern.....	7,395 28	5,573 58	1,821 70
2	Crawford & Manistee River.....	7,687 52	7,610 27	77 25
4	Hecia & Torch Lake.....	104,052 72	104,052 72	-----
5	Lake Superior & Ishpeming.....	80,900 25	31,889 80	49,010 95
6	Lewiston & Southeastern.....	2,384 70	7,443 73	-----
7	Manistee & Luther.....	51,392 13	36,966 42	14,425 71
8	Quincy & Torch Lake.....	28,446 85	28,446 85	-----
Total.....		\$144,669,399 02	\$101,803,790 13	\$43,001,078 43

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7.—REVENUE AND DISBURSEMENTS.—CONCLUDED.

year's business.	Payable from income.					Road No.
Deficit.	Interest on funded debt.	Interest on floating debt.	Rentals, etc.	Dividends.	Total.	
\$12,709 52		\$6,664 46			\$6,664 46	1
11,449 89						2
55,307 99	\$65,700 00	43,800 00			109,500 00	3
	660,000 00	89,196 83	\$13,945 50		763,141 83	4
		14,368 52			14,368 52	5
	7,573,104 01			\$8,713,268 44	11,286,372 45	6
	6,390,319 49	221,412 50	13,213 88	3,517,757 50	10,142,708 37	7
	408,364 28				408,364 28	8
		5,259 10	44,491 19		49,750 29	9
	86,250 00				86,250 00	10
	2,642,972 11		199,992 90	500,000 00	3,342,965 01	11
	324,500 00	27,009 88			351,509 88	12
	65,805 00	2,801 48	73,635 09		141,741 57	13
	116,000 00				116,000 00	14
	861,098 34	856 47			861,954 81	15
	591,106 66	22,216 64			613,323 30	16
						17
	463,491 97	45,337 83			508,829 80	18
	16,250 00			17,500 00	33,750 00	19
7,337 82	3,117,745 00	53,350 00	629,119 39	2,967,990 00	6,768,204 39	20
						21
		5,414 56			5,414 56	22
						23
	75,433 34				75,433 34	24
	1,067,800 00		1,633,239 27	749,520 00	3,450,559 27	25
933 49						26
	17,025 00	8,228 88		27,538 00	52,791 88	27
	1,147,016 84	49,258 46	101,021 09		1,297,296 39	28
						29
	5,256 68			30,000 00	35,256 68	30
		68,548 08			68,548 08	31
	45,000 00				45,000 00	32
4,962 38		527 33			527 23	33
	125,000 00				125,000 00	34
37,699 97	82,450 00				82,450 00	35
	49,025 00				49,025 00	36
	2,694,545 00	35,000 00	57,700 39		2,787,245 39	37
	45,000 00				45,000 00	38
						39
						40
						41
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\$326,464 59	\$22,773,082 42	\$704,579 11	\$2,768,358 70	\$11,523,573 94	\$43,769,544 17	

## 8.—GENERAL EXHIBIT, STATEMENT OF BALANCES.

Road No.	Railroads.	Balance, December 31, 1896.	
		Debit.	Credit.
1	Ann Arbor.....	\$19,378 98	-----
2	Arcadia & Betsey River.....	-----	\$2,979 56
3	An Sable & Northwestern.....	11,449 39	-----
5	Boyer City & Southeastern.....	-----	7,646 76
8	Chicago, Detroit & C. G. T. Junction.....	164,807 99	-----
9	Chicago & Grand Trunk.....	531,518 79	-----
10	Chicago, Kalamazoo & Saginaw.....	-----	3,305 48
11	Chicago & Kalamazoo Terminal.....	-----	800,929 84
12	Chicago, Milwaukee & St. Paul.....	-----	807,524 64
13	Chicago & Northwestern.....	-----	85,726 76
14	Chicago & West Michigan.....	85,726 76	-----
15	Chicago & North Michigan.....		20,367 50
16	Cincinnati, Jackson & Mackinaw.....	-----	81,641 71
17	Cincinnati, Saginaw & Mackinaw.....	211,306 09	-----
18	Cleveland, Cincinnati, Chicago & St. Louis.....	277,266 32	-----
19	Detroit, Grand Haven & Milwaukee.....	-----	48,902 82
20	Detroit, Lansing & Northern System.....	-----	3,520 63
23	Detroit & Mackinac.....	229,286 42	-----
24	Duluth, South Shore & Atlantic.....	-----	44,839 30
25	Flint & Pere Marquette.....	-----	4,067 01
26	Gogebic & Montreal Riv. (Op'd by Wis. Cent.).....	-----	166,326 25
27	Grand Rapids & Indiana System.....	-----	32,238 44
30	Hancock & Calumet.....	-----	300,401 52
31	Indiana & Lake Mich. (Op'd by Terre Haute & I.).....	-----	-----
32	Iron Range & Huron Bay.....	-----	-----
33	Lake Shore & Michigan Southern System.....	300,401 52	-----
43	Lowell & Hastings.....	-----	475 02
44	Manistee & Grand Rapids.....	-----	9,895 10
45	Manistee & Northeastern and Supplementary.....	-----	2,500 75
46	Manistique.....	-----	37,454 14
49	Michigan Air Line Railway.....	68,045 15	-----
50	Michigan Central System.....	11,294 73	-----
64	Midland & Northern.....	938 49	-----
65	Mineral Range.....	4,378 78	-----
66	Minneapolis, St. Paul & Sault Ste. Marie.....	-----	99,555 58
67	Munising.....	-----	17,641 82
68	Pontiac, Oxford & Northern.....	-----	3,254 64
69	Saginaw, Tuscola & Huron.....	49,411 03	-----
70	Saginaw Valley & St. Louis System.....	6,070 74	-----
72	Sault Ste. Marie Bridge Co.....	-----	-----
73	South Haven & Eastern.....	5,489 71	-----
74	St. Clair Tunnel.....	-----	17,070 08
77	Toledo, Saginaw & Muskegon.....	120,149 97	-----
78	Wisconsin & Michigan.....	26,151 17	-----
79	Wabash.....	200,554 24	-----
ORE AND FOREST ROADS.			
1	Bear Lake & Eastern.....	-----	1,821 70
2	Crawford & Manistee River.....	188 76	-----
5	Lake Superior & Ishpeming.....	-----	6,407 06
6	Lewiston & Southeastern.....	5,064 03	-----
7	Manistee & Luther.....	-----	12,425 71
8	Quincy & Torch Lake.....	-----	-----
	Total.....	\$2,576,899 02	\$1,784,844 13



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8.—GENERAL EXHIBIT, STATEMENT OF BALANCES.—CONCLUDED.

Balance forward from 1886.		Taken to account other than from traffic.		Balance forward to 1897.		Road No.
Debit.	Credit.	Debit.	Credit.	Debit.	Credit.	
	\$4,448 55		\$8,612 71	\$8,312 72		1
	335 96				\$3,315 52	2
	277,811 68				286,362 29	3
	10,150 84				17,797 60	5
			164,807 99			8
\$324,640 15		\$173,155 91	594,139 32	435,175 53		9
		3,305 43				10
	8,031,431 64	229,830 00	302,577 67		8,705,159 15	11
	9,584,079 25	6,492,313 25			3,890,290 64	12
	73,734 05			11,992 71		13
	46,197 61	49,750 29			66,565 11	14
						15
46,063 44			57,855 28	69,899 87		16
	454,602 37		7,792 90		251,067 18	17
			277,266 32			18
151,907 61				108,004 79		19
	135,235 91	59,466 01			79,290 53	20
980,775 43			82,402 20	1,177,659 65		21
	153,315 91				198,455 21	22
527 38					3,559 63	23
3,797,175 01		30,985 01		3,994,436 27		24
	280,114 47				292,352 91	25
						26
	11,637,435 08	156,675 14	354,811 77		11,535,220 14	27
8,905 90				5,430 88		28
245,264 47	83,306 12			245,763 72	93,201 22	29
						30
	207,955 60				245,409 74	31
	7,152,979 66		68,045 15		7,181,370 27	32
1,438 31			39,685 34	2,371 80		33
	159,613 88		12,500 00		167,735 10	34
823,555 87		100,291 70		824,291 99		35
	9,121 08	8,768 92			17,641 82	36
					3,606 75	37
209,916 14		5,411 11	1,007 68	269,730 60		38
190,864 97				196,935 71		39
	5,514 29				24 58	40
						41
29,792 07				12,721 99		42
256,666 13			34,459 82	342,356 33		43
8,358 18				34,509 35		44
				200,554 24		45
						46
	10,314 51				12,136 21	47
	158 76				6,407 66	48
				5,064 03		49
	85,471 85				97,471 85	50
	12,994 21				12,992 21	51
						52
\$7,075,871 11	\$38,030,426 18	\$7,309,902 77	\$1,955,984 15	\$7,935,182 18	\$33,156,153 32	53

## 9.—TRAFFIC EARNINGS.—ENTIRE SYSTEM.

Road No.	Railroads.	Passenger	
		Passenger fares.	Express and baggage.
1	Ann Arbor .....	\$220,266 36	\$20,570 68
2	Armadia & Betsay River .....	50 68	-----
3	As Sable & Northwestern .....	5,395 35	-----
5	Bozoye City & Southwestern .....	522 15	-----
8	Chicago, Detroit & C. G. T. Junction .....	122,699 38	10,884 75
9	Chicago & Grand Trunk .....	778,696 71	49,313 98
10	Chicago, Kalamazoo & Saginaw .....	17,578 64	870 42
12	Chicago, Milwaukee & St. Paul .....	5,932,099 16	859,196 98
13	Chicago & Northwestern .....	7,255,084 88	568,277 76
14	Chicago & West Michigan .....	-----	-----
15	Chicago & North Michigan .....	534,661 94	38,652 77
16	Cincinnati, Jackson & Mackinaw .....	170,987 59	84,599 96
17	Cincinnati, Saginaw & Mackinaw .....	84,653 21	1,869 87
18	Cleveland, Cincinnati, Chicago & St. Louis .....	3,828,029 36	358,468 26
19	Detroit, Grand Haven & Milwaukee .....	365,186 48	27,762 71
20	Detroit, Lansing & Northern System .....	465,792 01	23,580 00
23	Detroit & Mackinac .....	75,412 61	1,749 22
24	Duluth, South Shore & Atlantic .....	471,793 32	39,353 69
25	Flint & Pere Marquette .....	598,680 00	51,639 82
26	Gogebic & Montreal River (Op'd by Wis. Cent.) .....	4,240 60	597 71
27	Grand Rapids & Indiana System .....	618,068 65	45,969 38
30	Hancock & Calumet .....	11,809 90	333 89
31	Indiana & Lake Michigan (Op'd by Terre Haute & I.) .....	16,880 36	615 25
33	Lake Shore & Michigan Southern System .....	4,520,045 27	647,191 81
42	Lima Northern .....	9,086 55	1,800 00
43	Lowell & Hastings .....	2,854 00	86 68
44	Manistee & Grand Rapids .....	1,042 42	-----
45	Manistee & Northeastern and Supplementary .....	38,476 79	1,202 95
44	Manistique .....	9,244 99	-----
48	Mason & Oceana .....	1,632 51	-----
49	Michigan Air Line Railway .....	30,498 91	2,499 96
50	Michigan Central System .....	3,545,656 40	409,628 38
64	Midland & Northern .....	-----	-----
65	Mineral Range .....	31,132 19	1,658 02
66	Minneapolis, St. Paul & Sault Ste. Marie .....	475,082 18	37,377 36
67	Munising .....	8,436 80	328 85
68	Pontiac, Oxford & Northern .....	34,408 04	2,171 22
69	Saginaw, Tuscola & Huron .....	35,827 53	727 14
70	Saginaw Valley & St. Louis System .....	11,439 48	420 00
73	South Haven & Eastern .....	13,623 84	1,228 01
74	St. Clair Tunnel .....	-----	-----
77	Toledo, Saginaw & Muskegon .....	18,359 23	902 00
78	Wisconsin & Michigan .....	11,626 20	152 19
79	Wabash .....	2,966,035 73	300,108 12
80	Detroit Union E. E. Depot & Station Co. ....	-----	-----
81	The Fort Street Union Depot Co. ....	-----	-----
ORE AND FOREST ROADS.			
1	Bear Lake & Eastern .....	24 70	-----
2	Crawford & Manistee River .....	-----	-----
4	Hecla & Torch Lake .....	-----	-----
5	Lake Superior & Ishpeming .....	-----	-----
6	Lewiston & Southeastern .....	-----	-----
7	Manistee & Luther .....	197 00	-----
8	Quincy & Torch Lake .....	-----	-----
Total .....		\$38,308,719 61	\$3,541,646 77

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## 9.—TRAFFIC EARNINGS.—CONCLUDED.

department.			Freight department.			Total traffic earnings.	Road No.
Mails.	Other sources.	Total.	Freight.	Other sources.	Total.		
\$38,952 84	\$4,003 19	\$293,793 07	\$723,878 92	\$107,543 47	\$831,422 39	\$1,125,215 46	1
-----	-----	50 68	5,972 16	-----	5,972 16	6,022 84	2
1,742 76	-----	7,138 11	52,246 98	-----	52,246 98	59,385 09	3
307 24	-----	829 39	18,018 01	857 95	18,375 96	19,205 35	5
9,749 60	-----	143,283 71	90,230 20	-----	90,230 20	233,513 91	8
71,972 64	21,837 43	921,822 76	2,424,138 51	-----	2,424,138 51	3,345,961 27	9
1,923 60	266 40	20,639 06	31,225 04	246 41	31,471 45	52,110 51	10
1,198,797 00	380,806 45	8,370,901 59	22,751,402 17	-----	22,751,402 17	31,122,303 76	12
881,769 57	-----	8,705,082 21	23,122,496 97	-----	23,122,496 97	31,837,579 18	13
66,436 87	-----	639,751 58	998,261 99	8,809 77	1,001,571 76	1,641,323 34	14
-----	-----	-----	-----	-----	-----	-----	15
25,252 96	-----	230,790 51	468,294 19	-----	468,294 19	699,064 70	16
4,166 33	-----	40,689 41	87,688 21	-----	87,688 21	128,377 62	17
532,178 14	-----	4,718,695 76	8,026,813 90	-----	8,026,813 90	12,745,489 66	18
30,227 33	3,573 10	426,729 60	495,078 35	-----	495,078 35	921,807 95	19
51,374 54	-----	540,746 58	610,676 72	-----	610,676 72	1,151,423 30	20
13,839 22	-----	90,501 05	307,946 96	-----	307,946 96	398,448 01	23
51,871 83	-----	563,023 84	1,305,339 12	4,619 60	1,309,958 72	1,872,982 56	24
66,926 15	18,138 43	730,564 40	1,388,233 72	-----	1,388,233 72	2,118,798 12	25
316 29	-----	5,154 60	41,359 95	147 45	41,506 40	46,662 00	26
52,820 21	14,713 41	725,996 65	1,314,451 41	5,354 29	1,319,805 70	2,045,802 35	27
669 01	-----	12,812 80	164,818 13	-----	164,818 13	177,630 93	30
2,857 74	-----	20,353 35	46,616 76	-----	46,616 76	66,470 11	31
1,415,553 00	-----	6,582,790 08	13,043,049 87	245,992 05	13,289,041 92	19,871,432 00	33
-----	-----	10,886 55	18,991 58	-----	18,991 58	29,878 13	42
547 34	161 00	8,649 02	7,490 49	-----	7,490 49	11,139 51	43
-----	-----	1,042 42	33,832 63	-----	33,832 63	34,875 05	44
4,418 34	-----	44,098 08	156,191 32	-----	156,191 32	200,289 40	45
1,753 16	-----	10,968 15	105,565 13	-----	105,565 13	116,563 28	46
1,256 20	-----	2,908 71	11,438 10	-----	11,438 10	14,346 81	48
8,338 00	-----	41,331 87	106,109 24	-----	106,109 24	147,441 11	49
398,240 85	-----	4,353,525 63	9,412,461 76	-----	9,412,461 76	13,765,987 39	50
-----	-----	886 99	886 99	-----	886 99	886 99	64
1,330 59	-----	34,120 80	73,455 02	551 92	74,006 94	108,127 74	65
160,927 70	25,171 95	698,559 19	2,959,452 23	6,759 98	2,966,212 21	3,664,771 40	66
569 31	-----	4,334 46	31,449 53	-----	31,449 53	35,793 99	67
7,663 04	12 00	44,249 30	75,287 23	-----	75,287 23	119,536 53	68
5,178 23	-----	41,732 90	68,350 63	-----	68,350 63	110,083 53	69
1,055 40	-----	12,914 88	8,604 36	-----	8,604 36	21,519 24	70
1,880 14	-----	16,731 99	10,572 35	-----	10,572 35	27,304 34	73
-----	43,636 00	43,636 00	189,516 50	-----	189,516 50	233,152 50	74
7,274 01	37 30	26,572 54	61,549 00	-----	61,549 00	88,121 54	77
1,368 60	-----	13,476 99	87,917 13	7,636 94	95,544 07	109,021 06	78
507,027 96	78,253 45	3,871,425 28	7,878,077 70	213,805 43	8,091,883 13	11,963,308 39	79
-----	-----	-----	-----	112,099 19	112,099 19	112,099 19	80
-----	-----	-----	-----	126,149 22	126,149 22	126,149 22	81
-----	-----	24 70	7,370 53	-----	7,370 53	7,393 23	1
-----	-----	-----	7,687 52	-----	7,687 52	7,687 52	2
-----	-----	-----	104,062 92	-----	104,062 92	104,062 92	4
-----	-----	-----	80,900 25	-----	80,900 25	80,900 25	5
-----	-----	197 00	2,384 70	-----	2,384 70	2,384 70	6
-----	-----	-----	51,195 13	-----	51,195 13	51,195 13	7
-----	-----	-----	28,446 85	-----	28,446 85	28,446 85	8
\$5,627,563 74	\$590,607 11	\$43,068,537 23	\$99,092,475 11	\$839,563 67	\$99,932,038 78	\$143,000,576 01	

## 10.—ANALYSIS OF EARNINGS AND EXPENSES—ENTIRE LINE.

Road number.	Railroads.	Miles of road operated.	Total receipts		
			Total income.	Per train	
				Passenger.	Freight.
1	Ann Arbor.....	302.78	\$1,170,750 35	\$0 67.83	\$1 42.78
2	Arcadia & Betsey River.....	17.50	6,022 84		
3	An Sable & Northwestern.....	108	59,385 09	26	48
4	Boysie City & Southeastern.....	16	19,205 35	11	97
5	Chicago, Detroit & C. G. T. Junction.....	59.87	236,354 75	72	96
9	Chicago & Grand Trunk.....	335.27	3,348,518 00	83	1 06
10	Chicago, Kalamazoo & Saginaw.....	44.20	52,110 51	36.1	1 13
12	Chicago, Milwaukee & St. Paul.....	6,150.75	31,654,967 34	1 02.66	1 63.36
13	Chicago & Northwestern.....	5,030.78	32,177,152 81	87.44	1 41.43
14	Chicago & West Michigan.....	581.11	1,642,617 10	81	1 33
16	Cincinnati, Jackson & Mackinaw.....	414.49	707,086 36	46	96
17	Cincinnati, Saginaw & Mackinaw.....	53	128,835 35	62	2 03
18	Cleveland, Cincinnati, Chicago & St. Louis.....	1,804.74	18,011,462 62	88	1 28
19	Detroit, Grand Haven & Milwaukee.....	189	977,800 97	87	1 18
20	Detroit, Lansing & Northern System.....	378.82	1,169,643 32	47	53
23	Detroit & Mackinac.....	296.40	398,448 01	59	1 24
24	Duluth, South Shore & Atlantic.....	588.33	1,938,212 73	82	1 61.80
25	Flint & Pere Marquette.....	783.66	2,247,357 71	69	1 19
26	Gogebic & Montreal Riv. (Op'd by Wis. Cent.).....	16.30	46,704 80	27	2 46
27	Grand Rapids & Indiana System.....	584.79	2,063,614 59	79	1 58
30	Hancock & Calumet.....	81.42	178,088 43	48.92	1 04.87
31	Indiana & Lake Mich. (Op'd by Terre H. & I.).....	39.29	66,970 11	34	1 40
32	Lake Shore & Michigan Southern System.....	1,439.66	20,548,769 31	1 41	1 80
42	Lima Northern.....	67.07	29,878 13		
43	Lowell & Hastings.....	12.50	11,139 51	19	37
44	Manistee & Grand Rapids.....	44.71	35,049 89	05	1 58
45	Manistee & Northeastern and Supplementary.....	90.50	201,375 08	41	1 73
46	Manistique.....	59.50	116,713 28	17	1 64
48	Mason & Oceana.....	37	14,346 81	17	88
49	Michigan Air Line Railway.....	105.60	148,535 11	53	91
50	Michigan Central System.....	1,642.87	18,861,299 78	1 03	1 64
64	Midland & Northern.....	10	886 99		
65	Mineral Range.....	17.40	120,735 56	85.37	1 26.84
66	Minneapolis, St. Paul & Sault Ste. Marie.....	1,188.71	3,718,906 13	68.51	1 84.72
67	Munising.....	25.49	35,902 24	1 12	2 46
68	Pontiac, Oxford & Northern.....	100.59	119,692 53	55	89
69	Saginaw, Tuscola & Huron.....	68.57	111,546 31	48	1 60
72	Sault Ste. Marie Bridge Co.....		63,085 30		
73	South Haven & Eastern.....	36.60	27,786 08	27.83	17.25
74	St. Clair Tunnel.....	2.25	228,153 50		
77	Toledo, Saginaw & Muskegon.....	96.00	94,746 91	36	84
78	Wisconsin & Michigan.....	72.07	109,021 16	28	1 87
79	Wabash.....	1,979.60	12,158,125 95	80.96	1 41.83
80	Detroit Union R. R. Depot & Station Co.....		112,099 19		
81	The Fort St. Union Depot Co.....		128,149 22		
ORE AND FOREST ROADS.					
1	Bear Lake & Eastern.....	18	7,395 28		
2	Crawford & Manistee River.....	10	7,637 52		72
4	Hecla & Torch Lake.....	7.50	104,052 92		
5	Lake Superior & Ishpeming.....	20.50	80,900 25		6.15
6	Lewiston & Southeastern.....	10	2,334 70		61
7	Manistee & Luther.....	63	51,392 13		
8	Quincy & Torch Lake.....	6	28,446 85		1 82
Total.....		25,075.14	\$145,604,562 61	\$0 94.60	\$1 57.4

## 10.—ANALYSIS OF EARNINGS AND EXPENSES—ENTIRE LINE.—CONCLUDED.

from operation.		Operating expenses.				Net per mile operated.		Net per train mile.		Road number.
mile.		Total expenses and taxes.	Per mile of road.	Per train mile.	Percentage of expenses to earnings.	Surplus.	Deficit.	Surplus.	Deficit.	
Total.	Per mile of road.									
\$1 13.39	\$3,498 88	\$1,183,459 87	\$3,909 29	\$1 26.68	101.06		\$410 46		\$0 13.29	1
	344 17	3,043 28	173 90		50.53	\$170 27				2
43	549 86	70,834 48	655 88	52	119.28		106 02		00	3
74	1,200 33	11,558 59	722 41	44	60.00	477 92		\$0 30		5
80	3,933 20	288,821 90	4,864 78	98.99	110.84	931 58			18.19	8
1 00	9,987 53	3,116,894 96	9,296 67	93	93.08	374 56		07		9
61.3	1,178 97	34,438 56	779 10	40.5	66	399 87		20.8		10
1 41.99	5,097 33	19,465,087 38	3,164 67	88.15	62.08	1,982 66		53.84		12
1 22.33	6,396 06	21,226,924 80	4,219 41	80.69	65.97	2,176 65		41.64		13
1 06	2,826 67	1,321,475 88	2,274 03	85	80.45	532 64		21		14
72	1,730 64	696,968 57	1,559 01	65	90.08	171 63		07		16
1 18	2,431 23	124,247 06	2,344 28	1 14	98.42	86 95		04		17
1 09	7,078 71	10,079,798 60	5,483 78	84	85.45	1,594 93		25		18
1 07	5,173 66	903,577 41	4,780 83	99	92.41	392 83		08		19
50.05	3,096 30	1,007,345 22	2,859 16	43	84.67	437 14		07.05		20
1 00	1,851 63	281,102 23	948 12	70	70.19	403 51		30		23
1 27.87	3,239 36	1,273,142 14	2,163 99	85.9	66.80	1,075 37		41.47		24
95	2,777 07	1,586,198 11	2,062 93	71	75	694 14		24		25
1 30	2,865 32	42,617 79	2,614 58	1 18.41	91.25	270 74		11.59		26
1 18	4,151 65	1,723,111 54	3,463 26	98	83.42	687 39		20		27
97.13	5,668 00	112,099 99	3,567 79	61.14	62.95	100 21		35.99		30
72	1,704 51	74,307 93	1,891 27	80	111	286 76		08		31
1 67	14,026 89	13,726,154 67	9,534 52	1 14	67.97	4,492 37		53		33
	343 15									42
56	891 16	10,664 49	853 16	53	96	38 00		03		43
1 63	783 94	25,154 79	562 64	1 17	77.17	221 32		46		44
1 01	2,225 14	124,336 33	1,374 10	62	61.8	851 08		39		45
1 82	1,961 57	73,844 58	1,241 09	1 15	63	720 48		67		46
44	531 36	14,348 81	531 36	44	100					48
75	1,405 69	141,052 92	1,335 73	72.22	95	69 96		04.88		49
1 32	8,415 65	10,392,849 90	6,327 65	99	75.19	2,068 00		32.69		50
		1,820 40			205					64
1 09.83	6,220 43	59,422 96	3,438 10	80.70	55.27	2,782 33		49.13		65
1 41.94	3,102 56	2,291,191 83	1,977 99	88.18	71.91	1,085 05		40.99		66
2 81	1,408 81	18,260 42	716 38	1.43	50.86	692 11		1.38		67
72.65	1,196 92	81,181 21	811 81	49.28	67.82	385 11		28.37		68
85	1,663 96	91,566 44	1,375 49	70	82.71	287 47		15		69
		11,891 22								72
45.38	759 18	32,748 46	894 77	58.50	112		135 59		08.17	73
		91,083 42								74
64	809 80	132,446 88	1,132 02	90	139.79		322 22		26	77
1 09	1,512 61	86,147 23	1,195 23	86	79	317 38		23		78
1 14.09	6,178 76	9,571,434 80	4,943 42	91.28	80.01	1,235 84		22.81		79
		25,884 29								80
		8,343 84								81
72	410 85	5,573 58	809 64		75.78	101 21				1
1 98	768 75	7,610 27	761 03	71.07	98.99	7.72		00.72		2
6 15	13,874 30	104,062 72	13,874 30	1.93	100					4
61	3,946 85	31,689 30	1,555 57	2.42	39.42	2,390 78		3.78		5
	288 47	7,448 73	744 87	1.91	820.80		506 40		1 30	6
	815 74	86,966 42	586 77		72	228 97				7
1 83	4,741 14	28,446 85	4,741 14	1.82	100					8
\$1 26.5	\$5,806 71	\$101,808,790 13	\$4,475 24	-----	69.91					

## 11.—TRAIN MILEAGE AND TRAFFIC. (ENTIRE SYSTEMS.)

Road No.	Railroads.	Passenger trains, miles.	Freight trains, miles.	Total for trains earning revenue.
1	Ann Arbor.....	427,213	506,995	934,218
3	Au Sable & Northwestern.....	27,800	109,860	137,160
5	Boyer City & Southeastern.....	7,050	18,780	25,830
8	Chicago, Detroit & C. G. T. Junction.....	191,395	67,059	258,454
9	Chicago & Grand Trunk.....	1,093,067	2,063,696	3,156,763
10	Chicago, Kalamazoo & Saginaw.....	57,064	27,810	84,874
12	Chicago, Milwaukee & St. Paul.....	7,904,716	13,118,992	21,023,708
13	Chicago & Northwestern.....	9,732,602	15,682,503	25,415,105
14	Chicago & West Michigan.....	793,985	751,463	1,545,448
16	Cincinnati, Jackson & Mackinaw.....	465,372	401,623	866,995
17	Cincinnati, Saginaw & Mackinaw.....	65,021	40,486	105,507
18	Cleveland, Cincinnati, Chicago & St. Louis.....	5,594,936	6,074,751	11,669,687
19	Detroit, Grand Haven & Milwaukee.....	441,555	287,252	728,807
20	Detroit, Lansing & Northern System.....	656,708	490,800	1,147,508
23	Detroit & Mackinac.....	137,400	200,210	337,610
24	Duluth, South Shore & Atlantic.....	670,550	761,444	1,431,994
25	Flint & Pere Marquette.....	1,020,704	1,123,794	2,144,498
26	G. G. & Montreal River (Op'd by Wis. Cent.).....	19,093	16,859	35,952
27	Grand Rapids & Indiana System.....	893,764	774,399	1,668,163
30	Hancock & Calumet.....	26,190	157,169	183,359
31	Indiana & Lake Mich. (Op'd by Terre Haute & I.).....	59,280	33,286	92,566
33	Lake Shore & Michigan Southern System.....	4,655,339	7,391,380	12,046,719
42	Lima Northern.....	52,800	4,400	57,200
43	Lowell & Hastings.....	.....	.....	20,000
44	Manistee & Grand Rapids.....	21,477	.....	21,477
45	Manistee & Northeastern and Supplementary.....	104,806	87,111	191,917
46	Manistique.....	39,580	24,600	64,180
48	Mason & Oceana.....	17,000	13,000	30,000
49	Michigan Air Line Railway.....	56,886	52,839	109,725
50	Michigan Central System.....	4,237,946	5,741,906	9,979,852
65	Mineral Range.....	39,970	58,574	98,544
66	Minneapolis, St. Paul & Sault Ste. Marie.....	959,410	1,398,218	2,357,628
67	Munising.....	.....	8,914	8,914
68	Pontiac, Oxford & Northern.....	65,193	36,242	101,435
69	Saginaw, Tuscola & Huron.....	87,366	42,777	130,143
70	Saginaw Valley & St. Louis System.....	16,416	6,968	23,384
73	South Haven & Eastern.....	.....	.....	61,220
77	Toledo, Saginaw & Muskegon.....	56,434	176	56,610
78	Wisconsin & Michigan.....	48,280	51,114	99,394
79	Wabash.....	4,730,303	5,706,200	10,436,503
ORE AND FOREST ROADS.				
2	Crawford & Manistee River.....	.....	10,600	10,600
4	Fecia & Torch Lake.....	.....	54,000	54,000
5	Lake Superior & Ishpeming.....	.....	13,150	13,150
6	Lewiston & Southeastern.....	.....	3,900	3,900
7	Manistee & Luther.....	.....	.....	.....
8	Quincy & Torch Lake.....	.....	15,636	15,636
Total.....		45,526,886	63,474,414	118,001,300

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11.—TRAIN MILEAGE AND TRAFFIC.—CONCLUDED.

Through passengers, number.	Local passengers, number.	Total passengers, number.	Total passengers previous year, number.	Passengers carried 1 mile, number.	Passengers carried 1 mile, previous year, number.	Road No.
158	303,844	304,002	253,399	10,669,160	10,809,779	1
	1,740	5,976	8,378		8,273	2
	180,268	221,500	3,000		21,000	3
41,232	1,129,778	1,192,384	1,314,028	5,160,109	6,270,601	4
68,606				47,545,648	55,822,900	5
2,970	38,225	41,195	46,237		788,610	6
178,866	7,152,050	7,330,916	7,411,530	262,766,915	259,569,631	7
113,745	14,282,239	14,396,984	15,436,390	351,253,583	369,785,067	8
5,026	761,811	766,837	851,099	24,972,288	27,711,322	9
16,742	817,331	334,078	309,257	8,812,476	7,428,138	10
7,169		64,222	70,933		1,586,384	11
336,902	4,840,285	5,177,167	5,534,240	189,843,185	201,742,675	12
3,025	547,833	550,858	588,809	16,016,851	17,467,842	13
19,609	646,273	665,882	648,859	22,181,889	20,759,054	14
		73,207	69,467	3,278,209	2,482,956	15
47,173	321,278	368,451	355,979	17,234,390	15,422,530	16
28,404	948,923	977,327	1,070,197	28,099,819	30,009,707	17
18,523	15,047	33,570	30,040	144,139	148,471	18
49,975	908,344	958,319	1,061,040	28,257,233	29,464,357	19
	60,619	60,619	55,499	373,266	352,998	20
2,975	29,568	32,543	30,702	802,832	792,057	21
98,312	4,421,575	4,519,887	4,627,175	211,120,596	210,966,572	22
925	27,807	28,732		797,336		23
	15,900	15,900	16,630	111,300	116,410	24
	1,903	1,903		45,676		25
8,163	66,467	74,630	85,753	1,730,876	1,911,382	26
	11,500	11,500	11,433	280,000	251,526	27
	4,131	4,131	6,433	70,227	77,196	28
21	80,415	80,436	87,277	1,138,479	1,142,636	29
220,467	2,343,592	2,564,069	2,663,141	156,317,124	163,092,843	30
	125,625	125,625	108,771	1,217,721	977,738	31
40,333	234,904	275,237	248,947	22,143,538	19,991,818	32
	11,552	11,552		86,806		33
499	61,251	61,750	67,235	1,369,609	1,472,881	34
6,034	55,850	61,884	54,575	1,653,173	1,515,615	35
230	21,756	21,968	88,433	417,897	1,678,535	36
	33,062	33,062	32,871	462,868	388,625	37
349	31,231	31,580	43,597	726,387	1,074,151	38
1,402	20,228	21,630	12,027	359,350	333,451	39
		3,270,701	3,591,541	142,660,692	155,633,078	40
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1,317,885	40,111,666	44,782,385	47,243,450	1,562,353,996	1,608,524,611	

## 12.—TRAFFIC.—ENTIRE SYSTEMS.

Road No.	Railroads.	Average distance traveled by each passenger.	Average fare paid by each passenger.	Average through rate per mile.
1	Ann Arbor.....	35.09	\$0 75.07	\$0 02.05
3	Au Sable & Northwestern.....			
5	Boyer City & Southeastern.....	7	30	
8	Chicago, Detroit & C. G. T. Junction.....	23.30	55.39	02.34
9	Chicago & Grand Trunk.....	39.70	64.98	01.50
10	Chicago, Kalamazoo & Saginaw.....	16.61	43	02.70
12	Chicago, Milwaukee & St. Paul.....	35.84	80.91	02.35
18	Chicago & Northwestern.....	24.39	50.39	02.19
14	Chicago & West Michigan.....	32.56	69.72	01
16	Cincinnati, Jackson & Mackinaw.....	26.38	51.17	02.08
17	Cincinnati, Saginaw & Mackinaw.....	24.40	53.96	01.95
18	Cleveland, Cincinnati, Chicago & St. Louis.....	36.70	74	01.93
19	Detroit, Grand Haven & Milwaukee.....	29.1	66.28	02.11
20	Detroit, Lansing & Northern System.....	32.11	71.72	02.61
23	Detroit & Mackinac.....	44.78	1 03	
24	Duluth, South Shore & Atlantic.....	46.77	1 28.04	02.48
25	Flint & Pere Marquette.....	28.75	60.76	01.95
26	Gogebic & Montreal River (Op'd by Wis. Cent.).....	4.29	12.63	02.97
27	Grand Rapids & Indiana System.....	29.48	64	02.01
30	Hancock & Calumet.....	6.15	19.48	
31	Indiana & Lake Mich. (Op'd by Terre Haute & I.).....	25	52	02
38	Lake Shore & Michigan Southern System.....	46.7	1 00	02.07
42	Lima Northern.....	27.7	32	01.2
43	Lowell & Hastings.....	7	18	
44	Manistee & Grand Rapids.....	24	55	
45	Manistee & Northeastern and Supplementary.....	23.9	51.5	02.2
46	Manistique.....	20	80	
48	Marion & Oceana.....	14	40	
49	Michigan Air Line Railway.....	14.15	37.91	02.60
50	Michigan Central System.....	60.96	1 38	02.02
64	Midland & Northern.....			
65	Mineral Range.....	9.69	24.78	
66	Minneapolis, St. Paul & Sault Ste. Marie.....	80.45	1.73	01.69
67	Munising.....	7.5	30	
68	Pontiac, Oxford & Northern.....	22.1	55.7	01.89
69	Saginaw, Tuscola & Huron.....	26.71	57.89	02.08
70	Saginaw Valley & St. Louis System.....	19	52.03	02.71
73	South Haven & Eastern.....	14	41	
77	Toledo, Saginaw & Muskegon.....	23	58.14	02.33
78	Wisconsin & Michigan.....	18	55	02.73
79	Wabash.....	43.5	91.30	
ORE AND FOREST ROADS.				
2	Crawford & Manistee River.....			
4	Hecia & Torch Lake.....			
5	Lake Superior & Ishpeming.....			
6	Lewiston & Southeastern.....			
7	Manistee & Luther.....	20	60	
8	Quincy & Torch Lake.....			
Total.....		34.88	\$0 74.37	



COMMISSIONER OF RAILROADS.

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12.—TRAFFIC.—CONCLUDED.

Average local rate per mile.	Average rate per mile for all passengers.	Tons of through freight moved.	Tons of local freight moved.	Total tons of freight moved.	Total tons of freight moved previous year.	Road No.
\$0 02.15	\$0 02.16	118,389	851,674	970,068	976,148	1
		140,000		140,000	59,375	3
04.28	04.28	526	36,499	37,025	39,382	5
02.40	02.37	36,742	280,405	267,147	382,890	8
01.77	01.64	1,055,651	682,754	1,658,405	1,550,202	9
02.60	02.6	42,068	18,706	60,774	45,761	10
02.24	02.25	2,725,525	9,234,270	11,959,795	11,351,945	12
02.05	02.06	380,104	15,892,538	15,772,642	16,215,091	13
02.17	02.14	22,375	1,152,362	1,174,727	1,205,263	14
01.93	01.94	135,880	519,978	655,858	612,684	16
02.29	02.21	40,134	104,995	145,129	159,669	17
02.04	02.01	4,558,094	3,483,454	8,041,548	8,848,275	18
02.29	02.28	95,815	432,879	528,694	507,045	19
02.23	02.24	86,841	497,444	584,285	595,750	20
	02.30		423,836	433,836	436,107	28
02.68	02.73	505,675	1,832,722	2,338,397	2,181,288	24
02.12	02.11	575,748	1,030,130	1,605,878	1,528,694	25
02.93	02.94	745,528	1,176	746,704	919,555	26
02.18	02.16	167,759	1,438,112	1,605,871	1,681,419	27
03.16	03.16		1,118,960	1,118,960	1,069,002	30
02.1	02.1	92,931	31,061	124,012	119,396	31
02.16	02.14	2,229,614	11,432,805	13,662,419	14,382,641	32
01	01.1	63,433	8,706	72,139		42
02.57	02.57		13,543	13,543	12,745	43
	02.4		64,275	64,275	57,268	44
02.2	02.2	16,115	243,149	259,264	342,907	45
04	04		188,595	188,595	188,191	46
03	03		22,876	22,876	30,000	48
02.67	02.67	13,375	200,531	213,906	271,068	49
02.40	02.28	1,823,489	5,452,831	7,276,270	7,470,951	50
02.55	02.55		124,025	124,025	8,570	64
02.41	02.05	946,409	1,169,248	2,115,657	1,07,387	65
03.9	03.9	1,696	77,006	78,642	1,783,763	66
02.53	02.51	2,351	83,741	86,092	79,874	67
02.18	02.16	23,484	71,782	95,266	114,642	69
02.73	02.73	258	19,208	19,466	68,822	70
03	03		8,275	8,275	7,876	73
02.54	02.53	11,511	68,598	80,109	82,873	77
03.11	03.06	53,971	65,474	119,445	96,822	78
	02.09		5,879,674	5,879,674	6,061,392	79
		31,147		31,147	24,227	2
			1,459,622	1,459,622	1,413,860	4
		299,354	202	299,556		5
		11,213		11,213		6
03	03		51,400	51,400	74,806	7
		555,543		555,543	495,401	8
	\$0 02.13	17,608,633	65,179,851	82,788,489	83,618,352	

## 13.—TRAFFIC.—ENTIRE SYSTEMS.

Road No.	Railroads.	Mileage.			
		Through freight.	Local freight.	Total or tons moved one mile.	Moved one mile previous year.
1	Ann Arbor .....	35,374,633	71,277,671	106,652,304	99,360,425
2	Au Sable & Northwestern .....	.....	.....	.....	48,376
3	Boyne City & Southeastern .....	8,652	547,485	551,167	506,280
4	Chicago, Detroit & C. G. T. Junction .....	2,064,337	5,213,687	7,308,024	11,865,514
5	Chicago & Grand Trunk .....	347,694,231	87,395,040	435,089,271	389,610,957
10	Chicago, Kalamazoo & Saginaw .....	673,781	419,467	1,098,248	814,044
12	Chicago, Milwaukee & St. Paul .....	542,869,753	1,755,486,904	2,298,346,657	2,119,705,624
13	Chicago & Northwestern .....	140,524,012	2,190,768,692	2,331,292,704	2,108,592,211
14	Chicago & West Michigan .....	2,663,065	89,832,136	92,505,201	86,412,218
16	Cincinnati, Jackson & Mackinaw .....	12,669,086	53,018,589	65,717,675	56,358,321
17	Cincinnati, Saginaw & Mackinaw .....	2,127,102	8,192,675	5,319,777	5,815,705
18	Cleveland, Cincinnati, Chicago & St. Louis .....	909,744,481	381,484,246	1,291,238,727	1,403,341,080
19	Detroit, Grand Haven & Milwaukee .....	18,108,078	23,588,871	41,696,949	36,947,322
20	Detroit, Lansing & Northern System .....	13,032,699	39,687,556	52,720,255	51,944,882
23	Detroit & Mackinac .....	.....	.....	16,485,768	14,358,531
24	Duluth, South Shore & Atlantic .....	76,314,805	35,453,347	111,768,152	106,192,449
25	Flint & Pere Marquette .....	108,219,125	80,009,447	188,228,572	162,843,175
26	Gogebic & Montreal River (Op'd by Wis. C.) .....	4,159,292	7,056	4,166,348	4,776,516
27	Grand Rapids & Indiana System .....	18,118,856	135,597,762	153,716,618	173,932,708
30	Hancock & Calumet .....	.....	6,517,866	6,517,866	6,541,289
31	Indiana & Lake Mich. (Op' by T. H. & I.) .....	3,275,518	1,011,514	4,287,032	4,349,919
33	Lima Shore & Michigan Southern System .....	746,469,669	1,630,544,449	2,377,034,118	2,475,757,176
42	Lima Northern .....	.....	.....	286,784	.....
43	Lowell & Hastings .....	.....	.....	94,801	89,215
44	Manistee & Grand Rapids .....	.....	.....	1,636,934	1,053,405
45	Manistee & Northeastern and Supplementary .....	436,342	8,116,218	8,552,560	9,506,809
46	Manistique .....	.....	.....	5,028,585	5,432,493
48	Mason & Oceana .....	.....	.....	297,388	680,000
49	Michigan Air Line Railway .....	1,417,750	10,685,277	12,103,027	15,954,066
50	Michigan Central System .....	777,661,725	702,589,796	1,480,251,521	1,487,969,830
65	Mineral Range .....	.....	1,024,921	1,024,921	970,202
66	Minneapolis, St. Paul & Sault Ste. Marie .....	221,415,344	239,607,237	461,022,581	401,682,823
67	Munising .....	9,818	958,576	968,392	.....
68	Pontiac, Oxford & Northern .....	216,602	2,663,520	2,880,122	2,557,605
69	Saginaw, Tuscola & Huron .....	798,210	2,744,075	3,542,285	3,646,060
70	Saginaw Valley & St. Louis System .....	11,610	420,755	432,365	1,561,026
73	South Haven & Eastern .....	.....	.....	182,050	168,348
77	Toledo, Saginaw & Muskegon .....	1,321,554	2,812,158	4,133,712	4,092,296
78	Wisconsin & Michigan .....	1,786,440	1,386,918	3,173,358	2,156,432
79	Wabash .....	.....	.....	1,142,477,577	1,195,942,921
ORE AND FOREST ROADS.					
2	Crawford & Manistee River .....	.....	.....	.....	242,270
4	Hecla & Torch Lake .....	.....	.....	10,947,165	10,614,550
5	Lake Superior & Ishpeming .....	6,133,769	2,988	6,136,757	.....
6	Lewiston & Southeastern .....	.....	.....	112,130	.....
7	Manistee & Luther .....	.....	.....	.....	4,937,196
8	Quincy & Torch Lake .....	.....	.....	3,333,258	2,972,406
Total .....		3,995,385,867	7,564,176,899	12,740,422,706	12,472,394,620

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12.—TRAFFIC.—CONCLUDED.

Ton haul.			Rates.					Road N
Through miles.	Local miles.	All miles.	Average amount each ton hauled.	Per ton per mile, through.	Per ton per mile, local.	Per ton per mile, all.	Average per ton per mile, previous year.	
296.8	83.7	109.9	\$0 74.62	\$0 00.24	\$0 00.89	\$0 00.67	10 00.69	1
7	15	14.9	49	03	03	03	03.2	2
57	22.63	27.36	38.78	01.33	01.19	01.23	00.92	3
329.4	138.1	257.7	1 43.58	00.46	00.93	00.56	00.52	4
16.01	22.42	17.98	51	03	02.2	02.8	03.2	5
199.18	190.11	192.17	1 90.23	00.75	01	00.99	01.08	6
370	142	148	1 47	00.82	01	00.99	01.07	7
119.02	78.04	78.82	84.55	00.86	01.07	01.07	01.19	8
93.5	102	100.2	71	00.61	00.73	00.71	00.73	9
53	30.4	36.7	60.42	01.13	02	01.65	01.61	10
199.6	109.5	160.6	99.81	00.5	00.91	00.62	00.63	11
189	54.5	78.9	83.64	00.43	01.77	01.19	01.32	12
161.57	76.23	86.79	1 00.95	00.89	01.25	01.16	01.18	13
		38	71			02	02	14
150.90	19.34	47.79	55.82	00.76	02.04	01.16	11.17	15
187.96	77.66	117.21	86.44	00.88	01.21	00.73	00.83	16
5.58	6	5.58	5.53	00.97	11.90	00.99	00.96	17
106	94.29	95.72	82	00.73	00.87	00.99	00.82	18
	5.82	5.82	14.72		02.52	02.52	02.76	19
35.25	32.54	34.57	38	01.02	01.30	01.09	01.04	20
334.8	142.6	173.9	95.5	00.47	00.58	00.54	00.56	21
13	9	5	26	01.6	04.8	05.2		22
	7	7	55		07.8	07.8	07.4	23
	25.46	25.46	53		02.06	02.06	03.46	24
27	33.4	33.4	60	02.5	01.8	01.8	01.6	25
	26.61	26.61	55.9		02.1	02.1	02.2	26
106	53.28	56.58	50	02	02	02	01.7	27
426	129	199	49.60	00.64	00.90	00.87	00.81	28
			1 29	00.51	00.76	00.63	00.61	29
	8.26	8.26	59.22		07.16	07.16	08.20	30
224	206	218	1 39	00.53	00.74	00.64	0.62	31
6	12.44	12.31	40	07	03	03		32
92.1	31.8	33.4	87.4	01.44	02.71	02.61	02.54	33
33.98	36.22	37.18	71.74	02.23	01.82	01.92	01.92	34
45	21.90	22.21	44.20	03.21	01.95	01.99	02.32	35
		22	1 23		06	06	04	36
115	41	51.6	78.83	00.90	01.76	01.49	01.54	37
33.10	21.03	26.58	74	01.9	03.8	02.8	03.4	38
		194.3	133.98			00.68	00.69	39
10		10	24.6	02.4		02.4	02.4	40
20.50	14.8	20.45	27	01.3	02.3	01.3		41
10		10	21.8					42
								43
								44
226.9	115.89	158.86	\$1 20.7			\$0 00.784		45

## 14.—TONNAGE AND COMMODITIES MOVED.—ENTIRE SYSTEMS.

Road No.	Railroads.	Agricultural products. Tons.	Animal products. Tons.	Products of mines. Tons.
1	Ann Arbor .....	149,895	15,125	316,266
2	Arcadia & Betsay River .....	10		
3	Au Sable & Northwestern .....			
5	Boyer City & Southeastern .....	524	99	8
8	Chicago, Detroit & C. G. T. Junction .....	80,153	22,224	44,176
9	Chicago & Grand Trunk .....	470,198	499,333	160,778
10	Chicago, Kalamazoo & Saginaw .....	3,862	1,201	29,808
12	Chicago, Milwaukee & St. Paul .....			
13	Chicago & Northwestern .....	2,896,598	1,011,601	6,210,141
14	Chicago & West Michigan .....	196,236	20,079	155,401
16	Cincinnati, Jackson & Mackinaw .....	107,538	21,930	298,405
17	Cincinnati, Saginaw & Mackinaw .....	15,610	2,980	39,815
18	Cleveland, Cincinnati, Chicago & St. Louis .....	4,148,818	547,212	2,411,468
19	Detroit, Grand Haven & Milwaukee .....	207,309	28,762	79,223
20	Detroit, Lansing & Northern System .....	129,765	24,580	78,308
28	Detroit & Mackinac .....	6,128	5,709	4,502
24	Duluth South Shore & Atlantic .....	126,141	15,385	1,419,894
25	Flint & Pere Marquette .....	495,533	31,048	175,505
26	Gogebic & Montreal River (Op'd by Wis. Cent.) .....	4,273	338	731,576
27	Grand Rapids & Indiana System .....	273,650	20,563	241,892
30	Hancock & Calumet .....	2,686	31	882,486
31	Indiana & Lake Mich. (Op'd by Terre Haute & I.) .....	55,114	906	19,855
33	Lake Shore & Michigan Southern System .....	2,045,192	890,011	6,676,014
42	Lima Northern .....	18,108	1,178	37,262
43	Lowell & Hastings .....	4,889	974	1,035
44	Manistee & Grand Rapids .....	290	20	531
45	Manistee & Northeastern and Supplementary .....	6,523	1,408	6,430
46	Manistique .....			
48	Mason & Oceana .....	350	60	
49	Michigan Air Line Railway .....	65,422	3,554	27,479
50	Michigan Central System .....	1,433,832	664,355	1,599,477
65	Mineral Range .....	16,684	2,707	54,087
66	Minneapolis, St. Paul & Sault Ste. Marie .....	818,050	26,414	430,080
67	Munising .....	1,808	209	1,701
68	Pontiac, Oxford & Northern .....	37,634	4,197	12,364
69	Saginaw, Tuscola & Huron .....	18,449	2,434	46,177
70	Saginaw Valley & St. Louis System .....	1,190	241	1,891
73	South Haven & Eastern .....	4,074	43	684
77	Toledo, Saginaw & Muskegon .....	34,715	3,053	9,068
78	Wisconsin & Michigan .....	4,273	338	781,576
79	Wabash .....	1,611,494	680,764	1,702,646
ORE AND FOREST ROADS.				
2	Crawford & Manistee River .....			
4	Hecle & Torch Lake .....	533		1,429,591
5	Lake Superior & Ishpeming .....			296,336
6	Lewiston & Southeastern .....			
7	Manistee & Luther .....			
8	Quincy & Torch Lake .....			
Total .....		15,493,391	4,531,066	26,363,511

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14.—TONNAGE AND COMMODITIES MOVED.—CONCLUDED.

Forest products. Tons.	Manufactures. Tons.	Merchandise. Tons.	Other commodities. Tons.	Total tonnage.	Total tonnage previous year.	Freight originating on this road. Tons.	Road No.
288,459	115,249	36,800	46,669	969,063	976,143	382,831	1
187	58			255		255	2
140,000				140,000	59,375	140,000	3
36,089	205	40	60	37,025	39,342	36,499	5
22,897	14,813	17,587	63,297	267,147	382,390	174,836	8
108,905	81,006	181,536	241,649	1,688,405	1,550,202	432,871	9
4,169	3,828	7,155	10,756	60,774	45,261	21,881	10
1,873,073	1,611,281	1,044,025	1,125,923	11,959,795	11,351,945	11,969,795	12
517,582	105,341	118,118	61,920	15,772,642	16,215,091	13,544,398	13
				1,174,727	1,205,263	869,807	14
86,237	86,535	21,280	34,033	655,959	612,684	226,713	16
66,763	6,373	8,059	5,529	145,129	159,669	122,826	17
878,227	1,140,672	937,397	200,013	10,263,807	8,848,275	148,818	18
58,690	32,790	68,086	53,834	528,694	507,045	216,313	19
228,792	52,890	37,890	28,050	580,275	595,750	410,793	20
393,131	18,804	658	4,900	438,836	435,107	438,836	23
524,626	52,557	67,885	131,809	2,338,397	2,131,288	2,089,626	24
418,539	126,993	162,441	195,819	1,605,878	1,359,710	1,040,356	25
6,967	2,023	819	704	746,700			26
807,297	224,680	13,852	24,487	1,605,871	1,492,532	846,533	27
25,280	4,580	7,685	196,252	1,118,980	1,062,782	1,118,980	30
27,611	10,142	6,699	3,695	124,012	101,849	31,061	31
699,312	2,208,218	502,548	641,112	13,662,407	12,114,256	4,213,629	33
6,750	3,881	5,980		72,139		28,830	42
2,920	284	2,612	829	13,543	17,635	8,022	43
63,312	19	36	77	64,275	60,110	60,494	44
233,987	6,389	1,827	2,569	259,133	231,609	249,777	45
184,623		4,272		188,895	106,656	188,895	46
22,221	45	200		22,876	50,000	22,876	48
33,375	18,056	35,621	35,399	213,906	297,595	148,617	49
1,405,712	1,475,225		697,869	7,276,470	6,175,215	3,492,349	50
7,212	9,726	20,118	13,491	124,025	125,615	124,025	55
661,923	78,343	71,879	29,488	2,115,657	1,375,543	1,624,196	56
65,655	5,602	867		78,642		59,589	57
16,316	4,688	9,954	944	86,092	77,900	61,879	58
19,919			8,285	95,264	131,977	90,875	59
13,164	636	1,221	1,121	19,486	60,956	11,503	70
1,540	625	1,269		8,275	8,211	5,556	73
16,287	6,936	2,786	7,412	80,209	92,195	66,886	76
6,967	2,023	819	704	746,700	666,062	719,133	78
404,438	371,231	408,215	721,836	5,879,674	5,541,780	5,879,674	79
31,147				31,147	21,789	31,147	2
24,930	5,017		561	1,460,622	1,370,592	1,559,622	4
202		18		299,556		291,015	5
11,213				11,213		11,213	6
50,000		1,400		51,400	108,014	50,000	7
555,543				555,543	454,728	555,543	8
11,049,209	7,883,717	3,755,673	4,591,006	85,629,499	68,219,786	52,905,215	

## 15.—EQUIPMENT.

Road No.	Railroads.	Estimated value.	Locomotives, all classes.	Passenger cars, all classes.	Baggage, mail and express cars.
1	Ann Arbor.....	\$900,071 97	43	23	5
2	Armadia & Betsy River.....	13,607 07	1	—	—
3	Au Sable & Northwestern.....	—	21	2	2
5	Boyer City & Southeastern.....	7,400 00	2	1	—
8	Chicago, Detroit & C. G. T. Junction.....	—	—	—	—
9	Chicago & Grand Trunk.....	1,264,650 00	130	30	19
10	Chicago, Kalamazoo & Saginaw.....	30,500 00	4	2	2
12	Chicago, Milwaukee & St. Paul.....	—	844	413	287
13	Chicago & Northwestern.....	16,282,650 00	1,010	530	150
14	Chicago & West Michigan.....	1,041,550 00	77	46	27
16	Cincinnati, Jackson & Mackinaw.....	426,700 00	34	26	6
17	Cincinnati, Saginaw & Mackinaw.....	94,570 00	6	12	2
18	Cleveland, Cincinnati, Chicago & St. Louis.....	6,936,800 00	459	270	97
19	Detroit, Grand Haven & Milwaukee.....	458,700 00	29	34	11
20	Detroit, Lansing & Northern System.....	573,050 00	47	51	18
23	Detroit & Mackinac.....	285,690 00	20	9	6
24	Duluth, South Shore & Atlantic.....	1,858,900 00	94	37	12
25	Flint & Pere Marquette.....	1,481,620 00	103	93	24
27	Grand Rapids & Indiana System.....	1,453,800 00	68	69	22
30	Hancock & Calumet.....	159,600 00	8	4	—
33	Lake Shore & Michigan Southern System.....	10,175,138 00	548	327	96
42	Lima Northern.....	15,000 00	11	6	3
43	Lowell & Hastings.....	9,000 00	2	1	—
44	Manistee & Grand Rapids.....	50,251 40	2	—	—
45	Manistee & Northeastern and Supplementary.....	144,959 02	8	5	2
46	Manistique.....	69,877 66	3	1	—
47	Manistique & Northwestern.....	11,050 00	2	—	—
48	Mason & Oceana.....	50,000 00	7	—	—
49	Michigan Air Line Railway.....	8,700 00	—	1	1
50	Michigan Central System.....	8,420,537 00	461	262	110
64	Midland & Northern.....	1,000 00	1	—	1
65	Mineral Range.....	129,400 00	8	8	2
66	Minneapolis, St. Paul & Sault Ste. Marie.....	3,055,075 32	104	45	23
67	Munising.....	91,500 00	3	1	—
68	Pontiac, Oxford & Northern.....	118,845 55	6	7	1
69	Saginaw, Tuscola & Huron.....	99,750 00	10	13	3
73	South Haven & Eastern.....	12,900 00	3	7	1
74	St. Clair Tunnel.....	14,800 00	4	—	—
77	Toledo, Saginaw & Muskegon.....	89,840 00	6	2	4
78	Wisconsin & Michigan.....	277,525 00	7	2	—
79	Wabash.....	4,112,000 00	418	217	110
ORE AND FOREST ROADS.					
1	Bear Lake & Eastern.....	30,215 72	3	1	—
2	Crawford & Manistee River.....	9,150 00	1	—	—
4	Hecla & Torch Lake.....	209,510 00	11	1	—
5	Lake Superior & Ishpeming.....	280,930 31	11	—	—
6	Lewiston & Southeastern.....	4,275 00	2	—	—
7	Manistee & Luther.....	69,775 00	6	1	—
8	Quincy & Torch Lake.....	34,050 00	3	—	—
Total .....		\$60,541,414 02	4,647	2,610	1,049

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15.—EQUIPMENT.—CONCLUDED

Box freight cars.	Stock cars.	Platform and coal cars.	Ore and coal cars.	Conductor's way cars.	All other kinds of cars.	Total cars.	Number of locomotives equipped with train brake.	Cars equipped with power brakes.		Road No.
								Passenger.	Freight.	
1,337		404		26	14	1,809	42	23	727	1
8	3	15		1	34	50				2
1		12			313	340	21	4		3
					33	35	1	1		5
										8
148	15	145		68	10	430	180	49	16	9
2		10		1	15	82	4	4		10
19,014	2,503	5,884	310	491	152	28,554	760	768	9,800	12
20,269	2,881	6,895	4,851	546	239	35,911	998	894	24,195	13
1,759	25	1,034		31	45	2,967	74	73	346	14
1,044	18	231	111	14	3	1,453	34	31		16
30		65		2	1	112	6	14	1	17
8,648	638	1,660	1,195	211	382	13,101	437	367	3,894	18
362	25	196		21	51	700	29	45	24	19
514	43	686		28	12	1,352	47	69	13	20
95		381		5	252	748	20	14	160	23
1,143		580	1,323	30	20	3,145	71	49	6 9	24
1,729	44	1,153		46	476	3,565	63	117	6	25
1,352	49	1,363	69	52	39	3,015	63	92	580	27
16		99	166	8	1	229	7	4		30
11,313	759	2,247	4,994	284	442	20,464	548	425	12,480	33
										42
4		5		2		6	1	9		43
8		275		5	1	96	2	1	96	44
						296		7	1	45
1		95		3	40	140	3	1		46
		30			33	63				47
1		60	175	5		250				48
18		5				23				49
8,295	1,039	3,103	334	253	191	13,587	398	372	5,025	50
86		2			12	15				64
4,430	101	69		2	31	198	8	9		65
		705	150	78	135	5,662	103	68	471	66
		145		2	50	193	3	1	135	67
46	4	61		1		120	6	8		68
25		95		3	50	189	10	16		69
11		13			1	33	2	4		73
						9	4			74
80		52		9		140	6	6		77
489		110		2	4	587	5	2	10	78
6,165	1,085	5,189		225	83	13,024	402	327	2,117	79
		53			14	68				1
		34			2	36				2
4	30	45	380	3	4	467				4
		20	400	4	9	433	11		420	5
		30			1	31				6
2		10		1	231	245				7
		8	50	1	2	60				8
86,429	9,212	32,865	14,008	2,451	3,428	154,032	4,318	3,879	61,147	

## 16.—STATIONS AND EMPLOYÉES.

Road No.	Railroad.	Stations.		Employés.	
		Total.	In Michigan.	Total.	In Michigan.
1	Ann Arbor .....	68	64	869	747
2	Arcadia & Betsay River .....	13	13	25	25
3	Au Sable & Northwestern .....	22	22	153	153
4	Boysie City & Southeastern .....	6	6	24	24
5	Chicago, Detroit & C. G. T. Junction .....	12	12	327	327
9	Chicago & Grand Trunk .....	74	46	2,914	1,947
10	Chicago, Kalamazoo & Saginaw .....	12	12	52	52
12	Chicago Milwaukee & St. Paul .....	685	24	20,216	121
13	Chicago & Northwestern .....	746	46	20,745	1,399
14	Chicago & West Michigan .....	108	101	1,474	1,419
16	Cincinnati, Jackson & Mackinaw .....	93	37	817	299
17	Cincinnati, Saginaw & Mackinaw .....	21	21	124	124
18	Cleveland, Cincinnati, Chicago & St. Louis .....	521	8	9,432	54
19	Detroit, Grand Haven & Milwaukee .....	44	44	1,253	1,242
20	Detroit, Lansing & Northern System .....	80	80	1,146	1,142
23	Detroit & Mackinac .....	53	53	331	331
24	Duluth, South Shore & Atlantic .....	52	43	1,572	1,445
25	Flint & Pere Marquette .....	139	138	2,070	2,065
26	Gogebic & Montreal River (Op'd by Wis. Cent.) .....	2	2	28	28
27	Grand Rapids & Indiana System .....	159	122	2,285	1,971
30	Hancock & Calumet .....	6	6	91	91
31	Indiana & Lake Mich. (Op'd by Terre Haute & I.) .....	10	6	61	54
33	Lake Shore & Michigan Southern System .....	340	124	13,693	1,745
42	Lima Northern .....	16	1		
43	Lowell & Hastings .....	3	3	15	15
44	Manistee & Grand Rapids .....	2	2	38	38
45	Manistee & Northeastern and Supplementary .....	21	21	179	179
46	Manistique .....	4	4	30	30
48	Mason & Oceana .....	6	6	30	30
49	Michigan Air Line Railway .....	20	20	154	154
50	Michigan Central System .....	506	325	9,495	6,204
64	Midland & Northern .....	2	2	3	3
65	Mineral Range .....	5	5	103	103
66	Minneapolis, St. Paul & Sault Ste. Marie .....	115	13	2,082	422
67	Munising .....	3	3	46	46
68	Pontiac, Oxford & Northern .....	22	22	100	100
69	Saginaw, Tuscola & Huron .....	17	17	97	97
70	Saginaw Valley & St. Louis System .....	13	13	55	55
73	South Haven & Eastern .....	9	9	44	44
74	St. Clair Tunnel .....			55	19
75	St. Joseph Valley .....	4	4	16	16
77	Toledo, Saginaw & Muskegon .....	26	26	123	123
78	Wisconsin & Michigan .....	9	3	95	25
79	Wabash .....	466	16	7,678	333
ORE AND FOREST ROADS.					
1	Bear Lake & Eastern .....	5	5	11	11
2	Crawford & Manistee River .....	2	2	18	18
4	Hecla & Torch Lake .....			88	88
5	Lake Superior & Ishpeming .....	3	3	85	81
6	Lewiston & Southeastern .....	2	2	39	39
8	Quincy & Torch Lake .....	2	2	37	57
Totals .....		4,759	1,564	100,598	25,136



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18.—STATIONS AND EMPLOYÉS.—CONCLUDED.

Baggage-men.	Brake-men.	Conductors.	Engineers.	Firemen.	Laborers.	Shopmen.	Yardmen.	Others.	Road No.
6	57	28	46	46	203	214	44	235	1
1	1	1	1	1	17	1	8	3	2
1	11	11	15	15	85	7	1	2	3
1	2	2	2	2	10	2	1	2	4
9	20	14	25	25	56	88	140	8	5
36	225	100	134	134	830	624	92	739	9
1	1	2	2	2	21	2	2	21	10
3	6	4	4	4	75	3	3	23	12
403	1,474	799	1,177	1,305	5,036	4,368	785	5,398	13
12	70	41	66	67	509	82	47	625	14
12	51	26	38	38	245	186	5	226	16
1	5	2	6	7	37	5	8	53	17
80	514	265	437	437	2,450	1,625	629	2,995	18
24	50	26	43	47	444	152	36	431	19
9	59	27	45	47	447	86	32	394	20
5	32	14	17	17	183	61	2	50	23
22	82	41	62	63	504	179	51	568	24
22	121	65	92	97	836	211	78	555	25
2	2	2	10	10	2	4	4	26	26
24	131	62	92	98	520	306	143	889	27
2	12	6	7	6	25	6	4	25	30
196	4	3	4	4	14	8	5	17	31
196	702	351	607	637	2,726	2,019	978	5,677	33
1	1	1	1	1	4	1	6	42	42
4	2	2	2	2	20	4	2	2	44
11	7	7	7	7	41	13	2	89	45
6	8	8	8	8	1	10	1	1	46
1	5	1	4	4	13	2	1	48	48
3	13	9	4	4	70	1	3	47	49
77	570	307	494	516	2,318	882	696	3,635	50
2	5	1	1	1	12	24	2	45	64
33	13	3	5	5	100	32	19	203	65
6	3	3	3	3	15	2	2	14	66
2	4	3	3	3	32	17	36	68	68
2	4	4	5	5	31	18	28	69	69
1	4	3	3	3	19	3	22	70	70
1	1	2	2	1	24	3	1	9	73
10	5	5	6	6	5	5	23	74	74
1	1	1	1	1	6	1	1	75	75
2	7	4	4	5	51	6	1	43	77
1	8	4	5	5	44	21	56	78	78
12	36	24	20	20	139	26	56	79	79
2	4	2	2	2	4	1	2	1	1
1	1	1	1	1	13	1	10	4	2
18	5	5	5	5	30	4	15	5	4
1	1	1	1	1	35	1	1	6	5
2	2	2	2	2	20	2	4	8	6
987	4,382	2,306	3,582	3,711	18,302	11,221	3,756	23,374	8

17.—PERMANENT WAY.

Road No.	Railroads.	Bridge structures.			
		Wooden.		Stone or iron.	
		No.	Length, feet.	No.	Length, feet.
1	Ann Arbor .....	3	116	30	2,064
2	Arcadia & Betscy River .....	4	—	—	—
3	Au Sable & Northwestern .....	2	800	—	—
4	Bozoe City & Southeastern .....	2	98	—	—
5	Chicago, Detroit & C. G. T. Junction .....	—	—	6	792
9	Chicago & Grand Trunk .....	—	—	22	2,025
10	Chicago, Kalamazoo & Saginaw .....	38	1,430	—	—
12	Chicago, Milwaukee & St. Paul .....	8	586	2	180
13	Chicago & Northwestern .....	38	2,690	13	1,867
14	Chicago & West Michigan .....	7	686	22	2,808
16	Cincinnati, Jackson & Mackinaw .....	1	144	1	59
17	Cincinnati, Saginaw & Mackinaw .....	1	299	3	92
18	Cleveland, Cincinnati, Chicago & St. Louis .....	—	—	—	—
19	Detroit, Grand Haven & Milwaukee .....	—	—	25	3,452
20	Detroit, Lansing & Northern System .....	7	458	26	2,707
23	Detroit & Mackinac .....	4	764	8	1,553
24	Duluth, South Shore & Atlantic .....	30	2,174	8	539
25	Flint & Pere Marquette .....	10	623	29	3,728
26	Gogebic & Montreal River (Op'd by Wis. Cent.) .....	5	1,487	2	227
27	Grand Rapids & Indiana System .....	8	615	21	1,378
30	Hancock & Calumet .....	16	2,291	3	562
31	Indiana & Lake Michigan (Op'd by Terre Haute & I.) .....	—	—	—	—
32	Iron Range & Huron Bay .....	23	5,218	—	—
33	Lake Shore & Michigan Southern System .....	16	1,963	68	4,124
42	Lima Northern .....	—	—	—	—
43	Lowell & Hastings .....	10	670	—	—
44	Manistee & Grand Rapids .....	1	105	—	—
45	Manistee & Northeastern and Supplementary .....	14	600	—	—
46	Manistique .....	2	225	—	—
48	Mason & Oceana .....	3	450	—	—
49	Michigan Air Line Railway .....	1	80	2	141
50	Michigan Central System .....	7	372	371	11,362
64	Midland & Northern .....	—	—	—	—
65	Mineral Range .....	5	1,725	—	—
66	Minneapolis, St. Paul & Sault Ste. Marie .....	13	2,449	—	—
67	Munising .....	8	456	—	—
68	Pontiac, Oxford & Northern .....	27	1,370	—	—
69	Saginaw, Tuscola & Huron .....	12	576	1	77
72	Sault Ste. Marie Bridge Co. .....	—	—	1	1,900
73	South Haven & Eastern .....	8	750	—	—
75	St. Joseph Valley .....	—	—	—	—
77	Toledo, Saginaw & Muskegon .....	4	375	—	—
78	Wisconsin & Michigan .....	—	—	1	885
79	Wabash .....	33	326	1	184
81	The Fort Street Union Depot Co. .....	—	—	—	—
ORE AND FOREST ROADS.					
1	Bear Lake & Eastern .....	3	96	—	—
4	Hecla & Torch Lake .....	—	—	—	—
5	Lake Superior & Ishpeming .....	8	1,893	—	—
7	Manistee & Luther .....	3	150	—	—
8	Quincy & Torch Lake .....	—	—	—	—
Total .....		385	35,120	666	41,911

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17.—PERMANENT WAY.—CONCLUDED.

Bridge structures.								Railroad crossings.			Road No.
Combination.		Trestles.		Draw bridges.		Total.		At grade.	Over or under.	Total.	
No.	Length, feet.	No.	Length, feet.	No.	Length, feet.	No.	Length, feet.	No.	No.	No.	
3	343	55	3,813	—	—	91	6,366	11	1	12	1
—	—	8	3,800	—	—	4	—	1	—	1	2
—	—	—	—	—	—	10	4,600	—	—	1	3
—	—	—	—	—	—	2	98	—	—	—	5
—	—	—	—	1	123	7	915	7	—	7	8
—	—	42	1,332	—	—	64	3,357	11	1	12	9
—	—	—	—	—	—	38	1,430	3	—	3	10
—	—	130	12,531	—	—	140	13,206	4	1	5	12
4	701	303	27,089	—	—	358	32,347	17	8	25	13
4	688	164	19,732	6	803	203	24,712	12	1	13	14
—	—	177	15,990	—	—	179	16,198	6	3	9	16
2	281	30	3,508	3	360	39	4,540	9	—	9	17
—	—	31	1,878	—	—	31	1,878	—	2	2	18
—	—	37	2,616	2	135	64	5,903	12	1	13	19
—	—	74	5,219	—	—	107	8,384	9	—	9	20
1	477	25	2,352	1	220	39	5,366	3	—	3	23
—	—	231	39,680	1	32	270	42,425	24	10	34	24
9	939	—	—	4	669	52	5,959	32	3	35	25
2	150	—	—	—	—	9	1,855	3	4	7	26
7	1,075	141	11,052	—	—	177	14,120	23	1	24	27
—	—	5	1,178	—	—	24	4,031	2	1	3	30
—	—	23	1,905	—	—	23	1,905	—	1	1	31
—	—	—	—	—	—	23	5,228	—	—	—	32
—	—	68	9,448	2	307	154	15,543	40	2	42	33
—	—	1	434	—	—	1	434	1	—	1	42
—	—	—	—	—	—	10	670	2	—	2	43
2	56	1	75	—	—	4	236	3	1	4	44
—	—	—	—	1	160	15	760	6	—	6	45
1	300	—	—	—	—	3	525	1	—	1	46
—	—	—	—	—	—	3	450	—	—	—	48
—	—	59	4,366	—	—	62	4,587	6	—	6	49
1	900	600	30,066	7	1,083	966	43,793	48	8	56	50
—	—	4	162	1	180	10	2,067	2	—	2	64
—	—	89	14,010	—	—	102	16,459	3	—	3	65
—	—	—	—	—	—	—	—	8	1	9	66
—	—	5	2,553	—	—	13	3,009	—	1	1	67
—	—	—	—	—	—	27	1,370	3	1	4	68
—	—	—	—	1	35	14	688	—	—	—	69
—	—	—	—	—	—	1	1,900	—	—	—	72
—	—	—	—	—	—	8	750	2	—	2	73
—	—	11	1,529	—	—	11	1,529	—	—	—	75
—	—	70	6,837	—	—	74	7,212	7	—	7	77
—	—	6	303	—	—	7	688	—	—	—	78
1	194	84	4,768	1	184	120	5,656	8	—	8	79
—	—	1	3,520	—	—	1	3,520	—	—	—	81
—	—	—	—	—	—	—	—	—	—	—	—
—	—	3	766	—	—	6	862	—	—	—	1
—	—	5	1,500	—	—	5	1,500	1	1	2	4
7	3,304	2	2,412	—	—	17	7,609	2	1	3	5
—	—	1	60	—	—	4	210	3	—	3	7
—	—	9	1,517	—	—	9	1,517	1	1	2	8
—	—	—	—	—	—	—	—	—	—	—	—
44	9,498	2,495	238,000	31	4,301	3,621	328,772	340	55	395	—

## 18.—PERMANENT WAYS.

Road No.	Railroads.	Renewal of	
		With stone or iron pipe.	With sewer pipe.
1	Ann Arbor.....	-----	-----
2	Arcadia & Betsey River.....	-----	-----
3	Au Sable & Northwestern.....	-----	-----
9	Chicago & Grand Trunk.....	12	-----
12	Chicago, Milwaukee & St. Paul.....	12	-----
13	Chicago & Northwestern.....	2	1
14	Chicago & West Michigan.....	4	23
16	Cincinnati, Jackson & Mackinaw.....	1	4
18	Cleveland, Cincinnati, Chicago & St. Louis.....	70	5
19	Detroit, Grand Haven & Milwaukee.....	7	5
20	Detroit, Lansing & Northern System.....	-----	13
23	Detroit & Mackinac.....	-----	-----
24	Duluth, South Shore & Atlantic.....	1	-----
25	Flint & Pere Marquette.....	24	42
26	Gogebic & Montreal River (Op'd by Wis. Cent.).....	-----	-----
27	Grand Rapids & Indiana System.....	16	5
31	Indiana & Lake Mich. (Op'd by Terr. Haute & I.).....	-----	1
33	Lake Shore & Michigan Southern System.....	46	-----
44	Manistee & Grand Rapids.....	-----	-----
49	Michigan Air Line Railway.....	6	3
50	Michigan Central System.....	64	-----
67	Munising.....	-----	-----
69	Saginaw, Tuscola & Huron.....	16	-----
77	Toledo, Saginaw & Muskegon.....	-----	-----
79	Wabash.....	2	6
ORE AND FOREST ROADS.			
1	Bear Lake & Eastern.....	-----	-----
5	Lake Superior & Ishpeming.....	-----	-----
6	Lewiston & Southeastern.....	-----	-----
7	Manistee & Luther.....	-----	-----
8	Quincy & Torch Lake.....	-----	-----
Total.....		233	108

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18.—PERMANENT WAYS.—CONCLUDED.

timber culverts.		New bridges.						Road No.
With timber.	Total number renewed.	Wooden.		Iron or stone.		Total.	Total length, linear feet.	
		Number.	Length, linear feet.	Number.	Length, linear feet.			
				13	721	13	721	1
		1	50			1	50	2
12	24							3
6	18	3	227	2	471.5	5	698.5	9
28	31	37	2,773			37	2,773	12
	27	9	604	1	70	10	674	13
40	115							14
2	14			1	110	1	110	16
								18
	13	3	66	1	10	4	76	19
		2	320	6	1,117	8	1,437	20
5	6							23
	66	12	623	4	474	16	1,102	24
				2	227	2	227	25
9	30	7	456			7	456	26
	1							27
35	31			14	963	14	963	31
		1	75			1	75	33
1	10			1	71	1	71	44
20	34	2	1,655	3	326	5	1,981	49
	16	2	168			2	168	50
11	11							57
2	10	1	10.5			1	10.5	69
								77
		1	66			1	66	79
		1	1,893	1	3,304	2	5,197	1
								5
								6
								7
								8
171	562	82	8,991.5	49	7,883.5	131	16,875	

18. — TAXES PAYABLE JULY 1, 1907.

Road No.	Railroads.	Miles of road in Michigan upon which taxes are based.	Gross earnings as reported for Michigan.	Gross earnings per mile of road operated in Michigan.	Per cent of taxation on taxable income.	Total taxes assessed for Michigan.	Taxes per mile of road operated in Michigan.
1	Ann Arbor	296.73	\$1,026,167.27	\$3,458.26	2.21	\$22,666.88	\$83.19
2	Arcadia & Betsey River	17.50	6,022.84	344.16	2	120.45	6.88
3	Arcadia & North Western	103	59,385.09	549.86	2	1,187.70	10.99
4	Bay City Belt Line	8.00					
5	Boyet City & Southeastern	16	19,205.35	1,200.33			
6	Buchanan & St. Joseph						
7	Central Michigan	59.37	286,854.75	2,834.20	3.24	5,315.16	89.52
8	Chicago, Detroit & C. & T. Junction	224	2,166,353.25	9,671.23	2.82	64,254.21	286.85
9	Chicago & Grand Trunk	44.20	52,110.51	1,178.97	2	1,042.21	23.44
10	Chicago & Kalamazoo & Saginaw						
11	Chicago & Kalamazoo Terminal						
12	Chicago & Milwaukee & St. Paul	105.03	177,936.81	1,684.36	2	3,559.17	33.88
12½	Chicago, Milwaukee & St. Paul	47.06	60,906.91	1,294.51			
13	Chicago & North Western	521.19	2,083,694.60	4,017.14	2.25	47,175.13	90.51
14	Chicago & West Michigan	454.04	1,411,698.01	3,109.23	2.17	30,752.06	67.73
15	Chicago & North Michigan	92.61	123,753.12	1,336.28	2	2,475.66	26.72
16	Chicago & North Michigan	190.87	320,061.03	1,730.64	2	6,401.62	33.53
17	Cincinnati, Jackson & Mackinaw	53	128,855.35	2,431.23	2.08	2,691.38	50.78
18	Cincinnati, Saginaw & Mackinaw	35.14	131,064.72	3,729.78	2.23	2,925.21	83.24
19	Cleveland, Cincinnati, Chicago & St. Louis	189	977,820.97	5,173.66	2.57	25,171.40	131.18
20	Detroit, Grand Haven & Milwaukee	378.82	1,189,643.32	3,140.39	2.18	23,967.70	63.52
21	Detroit, Lansing & Northern System						
22	Grand Rapids, Lansing & Detroit						
23	Saginaw & Western	193.70	247,145.17	833.82	2	4,912.90	25.53
24	Detroit & Mackinac	102.70	153,477.09	1,494.43			
25	Detroit & Mackinac	475.03	1,741,171.49	3,597.18	2.22	38,778.96	81.63
26	Detroit, South Shore & Atlantic	762.25	2,116,826.40	2,777.08	2.14	45,296.16	59.42
27	East & Pere Marquette	16.30	46,704.80	2,885.82	2.15	1,004.62	61.63
28	Gebeles & Montreal River (Op'd by Wis. Cent.)	880.13	1,609,578.36	4,244.21	2.28	36,863.91	96.92
29	Grand Rapids & Indiana System	36.85	121,620.51	330.42	2	1,474.00	40.00
30	Grand Rapids & Indiana	26	44,550.58	1,713.09	2	891.01	34.27
31	Grand Rapids & Indiana	31.42	178,088.43	5,688.00	2.41	4,400.06	140.04
32	Grand Rapids & Indiana	26.06	43,288.45	1,728.06	2	855.76	34.56
33	Grand Rapids & Indiana	84					
34	Indiana & Lake Michigan (Op'd by Terre Haute & I.)	189.86	1,052,670.48	5,634.09	4.43	46,743.60	239.45
35	Indiana & Lake Michigan (Op'd by Terre Haute & I.)	57.65	38,551.70	651.97	2	731.03	12.66
36	Indiana & Lake Michigan (Op'd by Terre Haute & I.)	65.20	38,362.96	537.71	2	727.25	11.15
37	Indiana & Lake Michigan (Op'd by Terre Haute & I.)	44.54	520,120.62	9,533.18	2.94	15,357.82	28.06
38	Indiana & Lake Michigan (Op'd by Terre Haute & I.)	56.42	84,881.85	1,903.74	2	1,697.63	38.11
39	Indiana & Lake Michigan (Op'd by Terre Haute & I.)	36.57	133,256.60	2,280.99	2.06	2,747.19	47.02
40	Indiana & Lake Michigan (Op'd by Terre Haute & I.)	61.14	92,366.14	2,533.08	2.10	1,943.45	58.14
41	Indiana & Lake Michigan (Op'd by Terre Haute & I.)	10.22	87,170.74	1,425.75	2	1,743.41	28.51
42	Indiana & Lake Michigan (Op'd by Terre Haute & I.)	6.4	17,182.08	496.44	2	100.04	9.78
43	Indiana & Lake Michigan (Op'd by Terre Haute & I.)	12.50	2,321.35	362.71	2	48.42	7.26
44	Indiana & Lake Michigan (Op'd by Terre Haute & I.)		11,189.51	591.16	2	232.79	17.61

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		44.71	85,049.89	788.94	2	700.99	15.68
44	Manistee & Grand Rapids	44.71	185,899.77	2,836.01	2.09	3,962.24	60.95
45	Manistee & Northeastern	65.50	15,485.26	3,871.81			39.23
45 1/2	Manistee & Northeastern Supplementary	25	116,713.23	1,861.57	2	2,334.25	
46	Manistique	59.50					
47	Manistique & Northwestern	37	14,846.81	531.38	2	286.83	7.75
48	Mason & Oceana	105.60	148,441.11	1,403.69	2	2,970.70	58.12
49	Michigan Air Line Railway	221	4,254,267.16	19,250.53	3.48	148,070.68	670.01
50	Michigan Central System	83.80	17,724.27	524.38	2	143.48	10.48
51	Battle Creek & Sturgis	18	7,199.85	399.99	2	143.99	7.99
52	Battle Creek & Battle Creek	8.66	1,931.97	538.22	2	520.59	144.97
53	Canandaigua Southern Bridge	155	656,239.97	4,233.80	2.29	15,037.19	97.01
54	Detroit & Bay City	4.84	180.24	37.24	2	3.60	74
55	Detroit, Batavia & Dearborn	83.79	277,921.15	3,316.91	2.19	6,110.20	72.88
56	Grand River Valley	322.90	1,187,872.21	3,614.65	2.22	25,955.30	80.88
57	Jackson Lansing & Saginaw	39.50	60,885.72	1,528.75	2	1,207.71	30.57
58	Kalamazoo & South Haven	109.10	293,734.70	2,594.08	2.13	6,877.86	58.45
59	Michigan Air Line	14.68	7,469.93	508.87	2	149.39	10.17
60	Michigan, Montreal & Canada	83.01	24,200.69	292.14	2	485.01	5.74
61	Saginaw Bay & Northwestern	47.37	734,507.78	15,538.56	3.35	24,653.31	521.54
62	St. Joseph & Saginaw	10	636.99	48.69	2	17.73	1.77
63	Midland & Hubbard (Op'd by Midland & Northern)	17.40	120,735.56	6,220.43	2.09	9,181.74	182.46
64	Mineral Range	199.23	780,869.85	2,528.65	2.24	17,529.44	87.93
65	Minneapolis, St. Paul & Sault Ste. Marie	25.49	35,902.24	1,406.81			
66	Monong	100.59	119,892.53	1,049.92	2	2,393.85	23.79
67	Pontiac, Oxford & Northern	65.57	111,546.81	1,602.96	2	2,230.92	33.51
68	Saginaw, Tuscola & Byron						
69	Saginaw Valley & St. Louis System (Included in D., L. & N.)						
70	Sault Ste. Marie Bridge Co.	36	18,867.20	51,833.33	3.80	710.68	1,006.33
71	South Haven & Eastern	1.125	21,786.08	759.18	2	555.72	15.18
72	St. Clair Tunnel		116,576.76	108,623.7	3.90	4,550.57	404.49
73	St. Joseph Valley	96	94,746.91	809.80	2	1,894.93	19.74
74	Saginaw & Muskegon	31.93	34,113.22	1,084.05			
75	Wisconsin & Michigan	80.50	387,647.87	4,320.58	7.87	9,214.48	114.48
76	Wabash	3.84	112,099.19	38,562.63	2.50	2,802.47	899.06
77	Detroit Union R. R. Depot & Station Co.	1.41	126,149.23	89,467.54	3.80	3,153.73	2,236.65
78	The Fort Street Union Depot Co.						
ORE AND FOREST ROADS.							
1	Bear Lake & Eastern	18	7,365.28	410.85	2	147.90	8.21
2	Crawford & Manistee River	10	7,637.52	768.75	2	153.75	15.87
3	Dead River Op'd by D. S. S. & A.						
4	Hecla & Torch Lake	7.20	104,032.72	14,451.76	3.30	3,442.10	478.07
5	Lake Superior & Ishpeming	20.50	80,900.26	3,946.85			
6	Lewistown & Southwestern	13	2,384.70	183.43	2	183.43	14.11
7	Manistee & Luther	63	51,392.13	8,574.74	2	1,027.84	16.81
8	Quincy & Torch Lake	6	28,446.85	4,741.14	2.36	673.40	112.23
Total		7,800.365	829,209,114.48	33,693.30	2.26	\$742,074.63	\$95.13

a Exempt. b Not operated. c Special charter.

183.—COMPARATIVE TABLE SHOWING TAXES FOR SIX YEARS, 1891 TO 1896, INCLUSIVE.

Road No.	Railroads.	1891.	1892.	1893.	1894.	1895.	1896.
1	Ann Arbor .....					\$21,884 45	\$22,686 88
2	Aradina & Betsy River .....					19 20	120 45
3	Au Sabie & Northwestern .....				3970 83	1,045 72	1,187 70
4	Chicago, Detroit & C. (i. T. Junction) .....	41,611 47	44,318 68	52,880 41	6,380 73	6,849 80	5,315 16
5	Chicago & Grand Trunk .....	6,144 27	7,394 35	7,042 29	55,422 30	55,181 01	64,254 21
6	Chicago & Grand Trunk .....	80,835 88	83,039 06	98,885 99			
7	Chicago, Kalamazoo & Saginaw .....	1,032 54	1,050 81	1,070 28	999 39	986 15	1,042 21
8	Chicago, Milwaukee & St. Paul .....			3,822 34	3,911 04	3,804 41	3,539 17
9	Chicago & Northwestern .....	81,304 94	101,243 07	53,577 34	35,659 87	54,200 99	47,175 13
10	Chicago & West Michigan .....	36,828 50	40,748 90	36,105 85	29,520 30	31,809 45	30,752 05
11	Chicago & North Michigan .....						2,475 06
12	Cincinnati, Jackson & Mackinaw .....	7,286 74	7,087 11	6,624 87	6,327 08	6,380 90	6,401 62
13	Cincinnati, Mackinaw & Mackinaw .....	4,088 28	4,874 48	3,613 55	2,841 59	2,853 33	2,691 88
14	Cleveland, Cincinnati, Chicago & St. Louis .....		1,459 37	2,290 54	2,290 26	3,010 43	2,925 21
15	Cleveland, Grand Haven & Milwaukee .....	25,171 40	25,171 40	25,171 40	25,171 40	25,171 40	25,171 40
16	Detroit, Lansing & Northern System .....	28,115 69	28,402 51	28,790 18	24,130 18	25,401 17	25,957 70
17	Detroit & Mackinac .....						
18	Duluth, Superior, Shore & Atlantic .....	39,006 40	40,857 95	40,991 87	38,416 70	38,024 99	4,942 90
19	Flint & Pere Marquette .....	53,596 86	76,754 83	50,575 96	44,102 11	45,009 40	38,778 98
20	Grand Rapids & Indiana System .....	475 08	1,443 54	683 23	833 84	1,135 35	45,208 16
21	Grand Rapids & Indiana System .....	51,762 40	54,788 07	44,992 56	37,088 06	41,088 17	1,004 62
22	Grand Rapids & Indiana System .....						36,858 91
23	Grand Rapids & Indiana System .....	4,315 70	4,442 71	2,921 46	2,274 78	2,541 49	1,474 00
24	Grand Rapids & Indiana System .....	869 94	1,148 96	1,083 95	880 88	879 73	891 01
25	Grand Rapids & Indiana System .....	4,878 04	5,213 48	4,703 69	5,033 89	4,789 79	4,400 05
26	Grand Rapids & Indiana System .....	425 46	683 78	682 45	718 86	834 83	865 76
27	Grand Rapids & Indiana System .....	48,743 60	48,743 60	48,743 60	48,743 60	48,743 60	48,743 60
28	Grand Rapids & Indiana System .....						
29	Grand Rapids & Indiana System .....	723 90	778 51	896 55	908 80	884 25	731 03
30	Grand Rapids & Indiana System .....	836 81	898 74	844 16	803 19	799 22	727 25
31	Grand Rapids & Indiana System .....	16,203 26	18,341 69	15,078 00	11,067 36	16,068 60	15,837 83
32	Grand Rapids & Indiana System .....	2,058 50	2,227 68	1,868 18	1,998 51	1,780 42	1,697 63
33	Grand Rapids & Indiana System .....	3,258 44	3,642 96	3,170 85	2,763 54	2,917 17	2,747 19
34	Grand Rapids & Indiana System .....						
35	Grand Rapids & Indiana System .....	2,443 36	2,527 45	3,195 26	1,918 53	2,086 40	1,945 45
36	Grand Rapids & Indiana System .....	1,850 80	1,981 18	1,926 63	1,889 01	2,078 96	1,743 41
37	Grand Rapids & Indiana System .....	122 25	120 70	86 88	71 63	104 57	100 04
38	Grand Rapids & Indiana System .....						46 42
39	Grand Rapids & Indiana System .....	211 10	244 86	252 30	286 46	312 94	222 79
40	Grand Rapids & Indiana System .....						
41	Grand Rapids & Indiana System .....						
42	Grand Rapids & Indiana System .....						
43	Grand Rapids & Indiana System .....						
44	Grand Rapids & Indiana System .....						
45	Grand Rapids & Indiana System .....	2,300 83	2,544 38	685 90	834 78	756 75	700 99
46	Grand Rapids & Indiana System .....	2,608 57	1,715 53	3,751 62	2,869 03	3,842 26	3,992 24
47	Grand Rapids & Indiana System .....	806 91	764 79	1,488 88	1,250 04	2,844 56	2,834 26
48	Grand Rapids & Indiana System .....	3,086 21	3,362 48	3,398 88	492 99	373 92	296 98
49	Grand Rapids & Indiana System .....						2,970 70



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50	Michigan Central System	134,068 20	134,068 20	130,152 92	145,515 01	145,070 68
51	Battle Creek & Sturgis	398 36	419 23	371 20	387 35	384 48
52	Bay City & Kettle Creek	166 34	198 78	154 44	157 41	143 99
53	Canada Southern Bridge	24 57	27 32	39 37	41 33	530 59
54	Detroit & Bay City	20,641 93	20,008 83	14,079 49	14,931 64	15,037 19
55	Detroit, Delray & Dearborn	14,634 00	14,904 00	6,166 47	1 53	3 60
56	Grand River Valley	39,307 81	38,320 73	28,717 03	6,075 23	6,110 20
57	Jackson, Lausug & Saginaw	1,141 05	1,166 03	1,096 84	28,676 65	25,955 30
58	Kalamazoo & South Haven	5,450 01	5,342 87	4,591 75	1,142 68	1,207 71
59	Michigan Air Line R. R.	169 47	175 35	137 91	6,202 41	6,377 36
60	Michigan Midland & Canada	2,136 34	1,565 05	685 63	161 50	149 39
61	Saginaw Bay & Northwestern	20,588 51	22,064 42	19,867 96	775 40	435 01
62	Tonawanda Southern & Detroit	4,160 19	3,497 34	63 57	24,150 54	24,653 31
63	Wyandott & Northern			2,812 59	29 37	17 73
64	Muskegon Range				2,811 53	2,151 74
65	Manitowish, St. Paul & Sault Ste. Marie	11,415 52	13,334 19	10,445 87	12,165 98	17,529 44
66	Port Huron, Osgood & Northern	2,145 56	2,563 52	2,825 18	2,204 32	2,893 85
67	Saginaw, Leavenworth & Huron	2,135 63	2,475 49	2,371 98	2,283 42	2,230 92
68	Saginaw Valley & St. Louis System	1,838 89	1,900 56	1,718 82	1,631 15	1,631 15
69	Sault Ste. Marie Bridge Co.			657 32	674 19	710 68
70	South Haven & Eastern	540 76	518 58	425 35	382 85	555 72
71	St. Clair Tunnel	543 20	3,479 77	4,226 65	4,033 87	4,550 57
72	St. Joseph Valley	92 58	31 89	36 15		
73	Toledo, Saginaw & Muskegon	2,301 50	2,521 30	1,920 27	1,899 38	1,594 93
74	Wisconsin & Michigan					
75	Wabash	13,347 26	11,636 86	9,220 77	11,100 72	9,214 43
76	Detroit Union R. R. Depot & Station Co.	3,130 17	3,323 89	4,138 29	3,738 61	2,803 47
77	The Fort St. Union Depot Co.			3,174 65	3,068 86	3,153 73
78	Rear Lake & Eastern	231 19	224 76	126 25	146 10	147 90
79	Crawford & Manitowish River	263 63	148 99	153 77	117 33	153 75
80	Hecla & Torch Lake	3,267 11	3,062 47	2,639 41	2,629 74	3,442 10
81	Leavenworth & Northwestern					
82	Manitowish & Lathrop	2,254 85	2,280 40	2,052 27	1,495 12	1,027 84
83	Quincy & Torch Lake	835 22	424 57	543 45	511 45	673 40
Total		\$634,334 13	\$568,762 01	\$611,056 65	\$741,408 77	\$742,074 63

ORE AND FOREST ROADS.

19.—TOTAL INCOME AND EXPENSES, MICHIGAN, 1906.

Road No.	Railroads.	Proportion of income for Michigan	Proportion of expenses for Michigan.	Percentage of expenses to earnings.	Net earnings per mile of road.
1	Ann Arbor	\$1,026,167 27	\$1,100,027 26	101.06	.....
2	Armadia & Betsey River	6,022 84	3,043 28	50	\$170 26
3	Au Sable & Northwestern	59,383 08	70,884 48	.....	.....
5	Boyne City & Southern	19,205 35	11,538 59	60	477 92
8	Chicago, Detroit & C. & T. Junction	236,354 75	288,821 90	110.84	.....
9	Chicago & Grand Trunk	2,166,855 28	2,013,746 65	93.06	690 86
10	Chicago, Kalamazoo & Saginaw	52,110 51	84,436 56	68	399 86
12	Chicago, Milwaukee & St. Paul	791,374 18	191,921 94	62.06	1,932 66
13	Chicago & Northwestern	2,093,694 60	2,199,114 44	65.97	2,176 65
14	Chicago & West Michigan	1,535,451 13	1,248,091 08	80.45	552 64
16	Cincinnati, Jackson & Mackinaw	320,081 03	288,840 38	90.06	171 63
17	Cincinnati, Saginaw & Mackinaw	128,855 35	124,247 06	96.42	86 95
18	Cleveland, Cincinnati, Chicago & St. Louis	131,064 72	112,000 49	85.45	542 52
19	Detroit, Grand Haven & Milwaukee	977,630 97	933,577 41	92.41	392 82
20	Detroit, Lansing & Northern System { 9 months	930,080 00	785,774 40	84.60	374 88
	Detroit, Lansing & Northern System { 3 months	237,986 51	204,806 77	86.05	99 47
23	Detroit & Mackinaw	400,622 86	281,102 23	70.19	408 24
24	Duluth, South Shore & Atlantic	1,741,171 49	1,108,574 90	66.80	1,075 36
25	Flint & Pere Marquette	2,245,385 90	1,587,119 28	75	694 14
26	Gogebic & Montreal River (operated by Wisconsin Central)	46,104 80	42,617 79	91.25	250 74
27	Grand Rapids & Indiana System	1,775,086 17	1,522,691 47	85.42	673 31
30	Halcock & Calumet	178,088 43	112,089 99	62.96	2,100 20
31	Indiana & Lake Michigan (operated by Terre Haute & Indiana)	43,268 48	47,376 27	111	.....
33	Lake Shore & Michigan Southern System	2,048,882 24	1,876,888 37	67.97	4,492 59
43	Lowell & Hastings	11,139 51	10,664 49	96	38 00
44	Manistee & Grand Rapids	35,049 89	25,154 79	71.17	221 82
45	Manistee & Northern and Supplementary	201,375 08	124,856 83	61.8	851 08
46	Manistique	116,713 28	73,844 58	63	720 48
48	Marion & Oshtemo	14,846 81	14,846 81	100	.....
49	Michigan Ice Line Railway	146,588 11	141,052 92	95	1,406 09
50	Michigan Central System	7,508,205 64	6,161,934 64	75.19	2,088 00
64	Midland & Northern	886 99	1,820 48	205	.....
65	Mineral Range	120,736 56	59,822 96	50.27	2,782 88
66	Minneapolis, St. Paul & Sault Ste. Marie	780,869 85	556,218 41	71.91	1,069 06
67	Manistig	85,902 24	18,260 42	50.86	862 11
68	Pontiac, Oxford & Northern	119,692 58	81,181 21	67.82	386 11

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69	Saginaw, Tuscola & Huron .....	111,546 31	91,566 44	82.71	287 47
70	Saginaw Valley & St. Louis System .....	21,554 81	16,765 05	77.67	106 87
72	Sault Ste. Marie Bridge Co. ....	18,667 20	12,553 30	112	---
73	South Haven & Eastern .....	27,784 08	32,748 46	39.05	63,142 23
74	St. Clair Tunnel .....	116,576 75	45,541 71	139.79	---
		94,746 91	132,446 88	79	317 50
77	Toledo, Saginaw & Muskegon .....	34,113 22	23,705 64	---	---
78	Wisconsin & Michigan .....	347,806 67	292,694 84	80.01	1,235 94
79	Wabash .....	112,069 19	23,864 29	---	---
80	Detroit Union R. R. Depot & Station Co. ....	126,149 22	8,843 84	---	---
81	The Fort Street Union Depot Co. ....	---	---	---	---
ORE AND FOREST ROADS.					
1	Bear Lake & Eastern .....	7,395 28	5,573 53	75.78	---
2	Crawford & Manistee River .....	7,675 52	7,610 27	98.99	7 72
4	Hecla & Torch Lake .....	104,052 72	104,052 72	100	---
5	Lake Superior & Ishpeming .....	80,900 25	31,839 30	39.42	2,390 78
6	Lewiston & Southeastern .....	2,384 70	7,443 63	320.30	---
7	Manistee & Luther .....	51,392 13	36,946 42	---	---
8	Quincy & Torch Lake .....	23,446 85	23,446 85	---	---
Total .....		\$29,577,535 27	\$24,378,492 98	82	\$699 48

## 20.—TRAFFIC EARNINGS.—FOR MICHIGAN.

Road No.	Railroads.	Passenger			
		Passenger fares.	Express and baggage.	Mail.	Other sources.
1	Ann Arbor.....	\$224,454 02	\$20,210 68	\$38,295 72	-----
2	Arcadia & Betsey River.....	50 68	-----	-----	-----
3	Au Sable & Northwestern.....	5,395 35	-----	1,742 76	-----
4	Boyer City & Southeastern.....	522 15	-----	307 24	-----
5	Chicago, Detroit & C. G. T. Junction.....	122,699 88	10,834 73	9,749 60	-----
9	Chicago & Grand Trunk.....	481,932 07	32,875 98	47,981 76	-----
10	Chicago, Kalamazoo & Saginaw.....	17,578 64	870 42	1,923 60	\$286 40
11	Chicago, Milwaukee & St. Paul.....	38,778 40	9,294 17	9,589 88	429 86
12	Chicago, Milwaukee & St. Paul, Channing Div.....	7,753 13	4,149 78	2,220 96	2 57
13	Chicago & Northwestern.....	213,044 11	46,188 68	45,108 56	-----
14	Chicago & West Michigan.....	500,084 17	36,345 76	62,340 08	-----
16	Cincinnati, Jackson & Mackinaw.....	77,379 35	15,662 57	11,431 41	-----
17	Cincinnati, Saginaw & Mackinaw.....	34,653 21	1,469 87	4,168 33	-----
18	Cleveland, Cincinnati, Chicago & St. Louis.....	38,123 23	2,031 08	2,929 42	-----
19	Detroit, Grand Haven & Milwaukee.....	365,166 46	27,762 71	30,227 33	3,573 10
20	Detroit, Lansing & Northern System.....	465,792 04	23,580 00	51,874 54	-----
23	Detroit & Mackinac.....	75,412 61	1,749 22	13,339 22	-----
24	Duluth, South Shore & Atlantic.....	428,225 11	35,137 29	43,513 67	-----
25	Flint & Pere Marquette.....	593,289 07	51,639 82	66,928 15	18,138 43
26	Gogebic & Montreal Riv. (Op'd by Wis. Cent.).....	4,240 60	597 71	816 29	-----
27	Grand Rapids & Indiana System.....	526,749 25	40,829 05	46,366 16	13,041 63
30	Hancock & Calumet.....	11,809 90	833 89	669 01	-----
31	Indiana & Lake Mich. (Op'd by Terre H. & I.).....	12,083 79	566 78	1,690 36	-----
33	Lake Shore & Michigan Southern System.....	597,784 35	109,292 63	299,920 36	-----
42	Lima Northern.....	181 10	800 00	-----	-----
43	Lowell & Hastings.....	2,854 00	86 68	547 34	161 00
44	Manistee & Grand Rapids.....	1,042 42	-----	-----	-----
45	Manistee & Northeastern and Supplementary.....	38,476 79	1,202 95	4,418 34	-----
46	Manistique.....	9,244 99	-----	1,753 16	-----
48	Mason & Oceana.....	1,652 51	-----	1,256 20	-----
49	Michigan Air Line Railway.....	30,493 91	2,499 96	8,338 00	-----
50	Michigan Central System.....	2,148,718 16	235,870 33	255,617 88	-----
64	Midland & Northern.....	-----	-----	-----	-----
65	Mineral Range.....	31,132 19	1,658 02	1,370 59	-----
66	Minneapolis, St. Paul & Sault Ste. Marie.....	116,270 48	7,769 50	24,966 69	6,284 76
67	Munising.....	3,436 30	328 85	569 31	-----
68	Pontiac, Oxford & Northern.....	34,403 04	2,171 22	7,663 04	12 00
69	Saginaw, Tuscola & Huron.....	35,827 53	727 14	5,178 23	-----
70	Saginaw Valley & St. Louis System.....	11,439 48	420 00	1,055 40	-----
72	Sault Ste. Marie Bridge Co.....	-----	-----	-----	-----
73	South Haven & Eastern.....	13,623 84	1,228 01	1,880 14	-----
74	St. Clair Tunnel.....	21,818 00	-----	-----	-----
77	Toledo, Saginaw & Muskegon.....	18,359 23	902 00	7,274 01	37 80
78	Wisconsin & Michigan.....	3,835 02	56 25	688 50	-----
79	Wabash.....	88,472 09	4,710 52	7,273 09	2,196 06
80	Detroit Union R. R. Depot & Station Co.....	-----	-----	-----	-----
81	The Fort St. Union Depot Co.....	-----	-----	-----	-----
ORE AND FOREST ROADS.					
1	Bear Lake & Eastern.....	24 70	-----	-----	-----
2	Crawford & Manistee River.....	-----	-----	-----	-----
4	Hecla & Torch Lake.....	-----	-----	-----	-----
5	Lake Superior & Ishpeming.....	-----	-----	-----	-----
6	Lewiston & Southeastern.....	-----	-----	-----	-----
7	Manistee & Luther.....	197 00	-----	-----	-----
8	Quincy & Torch Lake.....	-----	-----	-----	-----
Total.....		\$7,449,493 85	\$731,716 25	\$1,121,939 83	\$44,143 11

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20.—TRAFFIC EARNINGS.—CONCLUDED.

department.	Freight department.			Total traffic earnings.	Operating receipts other than traffic earnings.	Total receipts from operation.	Road No.
Total.	Freight.	Other sources.	Total.				
\$282,960 42	\$707,608 21		\$707,608 21	\$990,568 63	\$35,598 64	\$1,026,167 27	1
50 68	5,972 16		5,972 16	6,022 84		6,022 84	2
7,138 11	52,246 98		52,246 98	59,385 09		59,385 09	3
829 39	18,018 01	\$357 95	18,375 96	19,203 35		19,203 35	5
143,283 71	90,230 20		90,230 20	233,513 91		233,513 91	8
362,789 81	1,601,859 65		1,601,859 65	2,164,649 46		2,164,649 46	9
20,639 06	31,223 04	246 41	31,471 45	52,110 51		52,110 51	10
58,083 81	119,885 00		119,885 00	177,958 81		177,958 81	11
14,126 44	46,780 47		46,780 47	60,906 91		60,906 91	12
304,291 35	1,778,113 15		1,778,113 15	2,082,401 50	11,290 10	2,093,694 60	13
598,780 01	927,745 19	7,728 46	935,468 65	1,534,218 66	1,292 49	1,535,511 15	14
101,473 33	211,983 54		211,983 54	316,458 87	3,622 16	320,081 03	16
40,689 41	87,688 21		87,688 21	128,377 62	477 73	128,855 35	17
38,083 73	92,680 99		92,680 99	130,764 72	300 00	131,064 72	18
426,729 60	495,078 35		495,078 35	921,807 95	56,013 02	977,820 97	19
540,746 58	610,676 72		610,676 72	1,151,423 30	14,361 66	1,165,784 96	20
90,501 05	307,946 96		307,946 96	393,448 01	2,174 85	400,622 86	23
508,876 07	1,190,148 84	4,619 80	1,194,768 44	1,701,644 51	7,124 78	1,708,769 29	24
729,973 47	1,386,832 91		1,386,832 93	2,116,826 40		2,116,826 40	25
5,154 60	41,359 95	148 95	41,508 90	46,663 50	41 80	46,704 30	26
626,986 09	1,124,111 24	4,834 90	1,128,946 14	1,755,982 28	19,165 94	1,775,098 17	27
12,812 30	164,818 13		164,818 13	177,630 93	457 50	178,088 43	30
14,350 93	28,937 55		28,937 55	43,288 48		43,288 48	31
1,006,997 34	1,024,076 19	17,308 71	1,041,384 90	2,048,382 24		2,048,382 24	33
481 10	1,840 25		1,840 25	2,321 35		2,321 35	42
3,649 02	7,490 49		7,490 49	11,139 51		11,139 51	43
1,042 42	33,832 63		33,832 63	34,675 05	174 84	35,049 89	44
44,088 08	156,191 32		156,191 32	200,289 40	1,085 63	201,375 03	45
10,993 15	105,565 13		105,565 13	116,663 28	150 03	116,713 28	46
2,908 71	11,438 10		11,438 10	14,346 81		14,346 81	48
41,331 87	106,109 24		106,109 24	147,441 11	1,000 00	148,441 11	49
2,340,206 37	4,827,500 25		4,827,500 25	7,467,706 62	40,502 02	7,508,208 64	50
	886 99		886 99	886 99		886 99	61
34,120 80	73,455 02	551 92	74,006 94	108,127 74	107 82	108,235 56	64
155,291 43	611,785 57	2,166 90	613,932 47	769,222 90	4,169 89	773,393 79	66
34,334 46	31,449 53		31,449 53	35,783 99	118 25	35,902 24	67
44,249 30	75,287 23		75,287 23	119,536 53	156 00	119,692 53	68
41,732 90	68,350 63		68,350 63	110,083 53	619 96	110,703 49	69
12,914 88	8,604 36		8,604 36	21,519 24	65 57	21,584 81	70
				18,667 20		18,667 20	72
16,731 99	10,572 35		10,572 35	27,304 34	481 74	27,786 08	73
21,818 00	94,758 25		94,758 25	116,576 25	50	116,576 75	74
26,572 54	61,549 00		61,549 00	88,121 54	6,625 37	94,746 91	77
4,579 77	26,169 76	3,363 69	29,533 45	34,113 22		34,113 22	78
102,651 76	234,288 02	10,886 59	245,154 91	347,806 67		347,806 67	79
				112,099 19		112,099 19	80
				126,149 22		126,149 22	81
24 70	7,370 58		7,370 58	7,395 28		7,395 28	1
	7,687 52		7,687 52	7,687 52		7,687 52	2
	101,422 98		101,422 98	101,422 98		101,422 98	4
	80,900 25		80,900 25	80,900 25		80,900 25	5
	2,384 70		2,384 70	2,384 70		2,384 70	6
197 00	51,193 13		51,193 13	51,392 13		51,392 13	7
	28,446 85		28,446 85	28,446 85		28,446 85	8
\$9,847,193 04	\$18,972,536 79	\$52,189 38	\$19,024,726 17	\$28,628,934 82	\$207,178 26	\$28,836,113 08	

## 21.—TRAIN MILEAGE AND TRAFFIC.—FOR MICHIGAN.

Road No.	Railroads.	Passenger trains, miles.
1	Ann Arbor .....	414,762
2	An Sable & Northwestern .....	27,800
3	Boysie City & Southeastern .....	7,050
4	Chicago, Detroit & C. G. T. Junction .....	191,595
5	Chicago & Grand Trunk .....	646,216
10	Chicago, Kalamazoo & Saginaw .....	57,084
12	Chicago, Milwaukee & St. Paul .....	55,795
13	Chicago & Northwestern .....	404,684
14	Chicago & West Michigan .....	746,902
16	Cincinnati, Jackson & Mackinaw .....	210,663
17	Cincinnati, Saginaw & Mackinaw .....	65,021
18	Cleveland, Cincinnati, Chicago & St. Louis .....	56,854
19	Detroit, Grand Haven & Milwaukee .....	441,535
20	Detroit, Lansing & Northern System .....	656,706
23	Detroit & Macinac .....	137,400
24	Duluth, South Shore & Atlantic .....	585,510
25	Flint & Pere Marquette .....	1,020,704
26	Gogebic & Montreal River (Op'd by Wis. Cent.) .....	19,088
27	Grand Rapids & Indiana System .....	774,560
30	Hancock & Calumet .....	26,190
31	Indiana & Lake Michigan (Op'd by Terre Haute & I.) .....	37,776
33	Lake Shore & Michigan Southern System .....	931,731
42	Lima Northern .....	9,600
43	Lowell & Hastings .....	
44	Manistee & Grand Rapids .....	
45	Manistee & Northeastern and Supplementary .....	104,806
46	Manistique .....	
48	Mason & Oceana .....	17,000
49	Michigan Air Line Railway .....	56,886
50	Michigan Central System .....	2,610,067
65	Mineral Range .....	39,970
66	Minneapolis, St. Paul & Sault Ste. Marie .....	179,186
67	Monising .....	
68	Pontiac, Oxford & Northern .....	63,198
69	Saginaw, Tuscola & Huron .....	87,366
70	Saginaw Valley & St. Louis System .....	16,416
73	South Haven & Eastern .....	
77	Toledo, Saginaw & Muskegon .....	56,434
78	Wisconsin & Michigan .....	21,407
79	Wabash .....	191,212
ORE AND FOREST ROADS.		
2	Crawford & Manistee River .....	
4	Hecia & Torch Lake .....	
5	Lake Superior & Ishpeming .....	
6	Lewiston & Southeastern .....	
8	Quincy & Torch Lake .....	
	Total .....	10,971,176

COMMISSIONER OF RAILROADS.

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21.—TRAIN MILEAGE AND TRAFFIC.—CONCLUDED.

Freight trains, miles.	Total for trains earning revenue.	Through passengers, number.	Local passengers, number.	Total passengers, number.	Passengers carried 1 mile, number.	Road No.
490,045	904,807	158	303,543	303,701	10,359,119	1
109,360	187,160	8,976		8,976		3
18,760	25,830		1,740	1,740	12,180	5
67,059	291,776	41,232	180,268	221,500	5,160,109	8
1,375,784	2,177,515	68,606	291,778	360,384	29,392,423	9
	84,894	3,970	38,225	41,195	684,179	10
115,305	217,722	4,472	178,801	183,273	6,569,173	12
1,133,938	1,632,832	1,010	278,095	279,105	7,288,305	13
706,901	1,453,803	4,728	716,635	721,363	24,391,431	14
181,805	444,010	7,578	143,648	151,226	3,989,196	16
40,466	109,048	7,169	57,053	64,222	1,569,335	17
60,758	122,368	8,600	66,978	75,578	1,696,904	18
267,252	910,803	3,025	547,933	550,958	16,016,951	19
490,600	1,147,308	19,809	646,273	665,892	22,161,889	20
200,210	401,600			73,207	3,278,209	23
654,538	1,304,593	45,540	303,087	348,627	15,250,419	24
1,122,794	2,231,782	28,404	948,904	977,308	28,086,440	25
16,899	35,992	18,523	15,047	33,570	144,139	26
642,880	1,501,513	50,089	775,722	825,811	27,911,401	27
157,161	183,359		60,619	60,619	373,286	30
21,217	58,993	1,896	18,851	20,747	512,207	31
800,293	1,732,024	17,708	918,414	936,122	25,906,574	33
544	14,844	49	522	571	8,352	42
21,477	20,000		15,900	15,900	111,300	43
	21,477		1,903	1,903	45,678	44
87,111	198,469	8,163	66,487	74,630	1,730,876	45
39,580	64,180		11,500	11,500	230,000	46
13,000	30,000		4,131	4,131	70,227	48
52,939	195,298	21	80,415	80,436	1,138,479	49
3,172,995	6,138,865	220,474	1,880,400	2,100,874	90,541,682	50
58,574	98,544		125,625	125,625	1,217,721	65
267,255	529,830	24,979	50,270	75,249	5,146,978	66
8,914	12,790		11,552	11,552	86,806	67
38,242	164,735	499	61,251	61,750	1,369,609	68
42,777	130,143	6,034	55,850	61,884	1,653,173	69
6,968	23,384	230	21,756	21,986	417,987	70
	61,220		33,062	33,062	462,968	73
176	147,243	349	31,231	31,580	726,387	77
22,659	44,066	1,037	13,089	14,126	183,638	78
225,210	419,422			130,828	5,706,428	79
10,600	10,600					2
54,000	54,000					4
13,150	13,150					5
3,900	3,900					6
15,636	15,636					8
12,833,072	25,521,028	602,123	8,956,538	9,762,701	341,602,026	

## 22—TRAFFIC.—MICHIGAN.

Road No.	Railroads.	Average distance traveled by each passenger.	Average fare paid by each passenger.	Average through rate per mile.	Average local rate per mile.	Average rate per mile for all passengers.	Tons of through freight moved.	Tons of local freight moved.	Total tons of freight moved.
1	Ann Arbor	24.10	\$0 73.30	\$0 02.05	\$0 02.16	\$0 02.16	124,310	845,753	970,063
2	Armadillo & Betsey River	.....	.....	.....	.....	.....	234	.....	234
3	Au Sable & Northwestern	.....	.....	.....	.....	.....	140,000	.....	140,000
4	Boyet & Southern	.....	.....	.....	.....	.....	36,526	36,499	73,025
5	Chicago, Detroit & St. T. Junction	23.30	55.39	2.34	2.40	2.37	36,742	230,405	267,147
6	Chicago & Grand Trunk	81.60	1 33.73	1.49	1.80	1.64	1,055,651	421,526	1,477,177
7	Chicago, Kalamazoo & Saginaw	16.61	43	2.70	2.60	2.60	42,068	18,708	60,776
8	Chicago, Milwaukee & St. Paul	33.84	80.91	2.55	2.24	2.35	68,138	230,537	298,675
9	Chicago & Northwestern	26.11	76.33	2.07	2.93	2.92	4,923	4,174,336	4,179,259
10	Chicago & West Michigan	30.63	65.53	0.94	2.04	2.14	21,048	1,084,017	1,105,065
11	Cincinnati, Jackson & Mackinaw	28.38	51.17	2.03	1.93	1.94	61,510	235,381	296,891
12	Cincinnati, Saginaw & Mackinaw	24.40	53.96	1.95	2.29	2.21	49,134	104,995	154,129
13	Cleveland & Cincinnati, Chicago & St. Louis	22.50	44	1.93	2.04	1.95	814,313	190,378	1,004,691
14	Detroit Grand Haven & Milwaukee	29.10	66.23	2.11	2.29	2.23	95,815	432,879	528,694
15	Detroit Lansing & Northern System	32.11	71.73	2.34	2.23	2.24	66,841	497,444	564,285
16	Detroit & Mackinac	44.73	1 03	.....	.....	.....	.....	433,836	433,836
17	Duluth South Shore & Atlantic	43.74	1 22.83	2.53	2.99	2.81	465,443	1,757,047	2,222,490
18	Flint & Pere Marquette	23.74	60.70	1.95	2.13	2.11	575,743	1,030,130	1,605,873
19	Gagabie & Montreal River (Op'd by Wis. Cent.)	4.29	12.63	2.97	2.92	2.91	745,528	1,176	746,704
20	Grand Rapids & Indiana System	33.79	64	2.02	1.83	1.89	176,792	1,192,594	1,369,386
21	Hancock & Chatham	6.16	19.43	.....	.....	.....	.....	1,118,950	1,118,950
22	Indiana & Lake Mich. (Op'd by Terre Haute & I.)	23	56	2.40	2.40	2.40	59,230	19,530	78,760
23	Lake Shore & Michigan Southern System	25.70	33	2.16	2.31	2.30	115,109	2,253,522	2,368,631
24	Lima Northern	14.00	33	2.00	1.50	1.70	9,002	397	9,399
25	Lowell & Hastings	7	13	.....	2.57	2.57	.....	13,543	13,543
26	Manistee & Grand Rapids	24	55	.....	.....	.....	.....	64,275	64,275
27	Manistee & Northwestern and Supplementary	23 2	51.30	2.20	2.20	2.20	16,115	243,149	259,264
28	Manistique	20	50	.....	.....	.....	.....	138,905	138,905
29	Mason & Oceana	14	40	.....	.....	.....	.....	22,876	22,876
30	Michigan Air Line Railway	14.15	37.91	2.00	2.67	2.67	13,375	200,531	213,906
31	Michigan Central System	43.10	1 02	1.53	2.33	2.73	2,357,394	3,857,249	6,214,643
32	Mineral Range	9.69	24.76	.....	2.56	2.56	.....	124,025	124,025
33	Minneapolis, St. Paul & Sault Ste. Marie	69.88	1 54	1.35	3.21	3.33	659,294	634,751	1,294,045
34	Montclair	7.50	30	.....	3.90	3.90	1,636	77,006	78,642
35	Pontiac, Oxford & Northern	22.10	55.70	1.89	2.53	2.51	2,351	83,741	86,092
36	Saginaw, Tuscola & Huron	26.71	57.99	2.34	2.13	2.16	23,484	71,752	95,236





## 23.—TRAFFIC FOR MICHIGAN.

Road No.	Railroads.	Mileage.		
		Through freight.	Local freight.	Total tons moved one mile.
1	Ann Arbor .....	36,397,968	69,544,002	105,941,970
5	Boyme City & Southeastern .....	3,682	547,485	551,167
8	Chicago, Detroit & C. G. T. Junction .....	2,091,337	5,213,687	7,305,024
9	Chicago & Grand Trunk .....	231,796,154	58,263,360	290,059,514
10	Chicago, Kalamazoo & Saginaw .....	673,781	419,467	1,093,248
12	Chicago, Milwaukee & St. Paul .....	13,571,494	43,887,172	57,458,666
13	Chicago & Northwestern .....	141,086	201,300,665	204,441,751
14	Chicago & West Michigan .....	2,403,145	84,569,160	87,004,305
16	Cincinnati, Jackson & Mackinaw .....	5,748,571	24,000,213	29,748,814
17	Cincinnati, Saginaw & Mackinaw .....	2,127,102	3,192,675	5,319,777
18	Cleveland, Cincinnati, Chicago & St. Louis .....	10,496,184	4,402,347	14,900,481
19	Detroit, Grand Haven & Milwaukee .....	18,108,078	23,588,871	41,696,949
20	Detroit, Lansing & Northern System .....	13,032,699	39,687,556	52,720,255
23	Detroit & Mackinac .....		16,485,768	16,485,768
24	Duluth, South Shore & Atlantic .....	64,276,708	32,914,024	97,190,732
25	Flint & Pere Marquette .....	108,119,561	79,885,831	188,005,392
26	Gogebic & Montreal Riv. (Op'd by Wis. Cent.) .....	4,159,292	7,036	4,166,348
27	Grand Rapids & Indiana System .....	18,883,852	126,666,181	145,550,033
30	Hancock & Calumet .....		6,517,866	6,517,866
31	Indiana & Lake Mich. (Op'd by Terre Haute & I.) .....	2,089,680	645,346	2,735,026
33	Lake Shore & Michigan Southern System .....	11,728,271	128,365,431	140,093,702
42	Lima Northern .....		29,643	29,643
43	Lowell & Hastings .....	74,801	20,000	94,801
44	Manistee & Grand Rapids .....	1,615,457	21,477	1,636,934
45	Manistee & Northeastern and Supplementary .....	436,342	8,116,218	8,552,560
46	Manistee .....		5,026,585	5,026,585
48	Mason & Oceana .....		297,888	297,888
49	Michigan Air Line Railway .....	1,417,750	10,685,277	12,103,027
50	Michigan Central System .....	421,703,050	247,517,340	669,220,390
65	Mineral Range .....		1,024,921	1,024,921
66	Minneapolis, St. Paul & Sault Ste. Marie .....	59,050,702	29,866,889	88,917,591
67	Munising .....	9,816	958,576	968,392
68	Pontiac, Oxford & Northern .....	216,602	2,663,520	2,880,122
69	Saginaw, Tuscola & Huron .....	788,210	2,744,075	3,542,285
70	Saginaw Valley & St. Louis System .....	11,610	420,755	432,365
73	South Haven & Eastern .....		182,050	182,050
74	St. Clair Tunnel .....			
77	Toledo, Saginaw & Muskegon .....	1,321,554	2,812,158	4,133,712
78	Wisconsin & Michigan .....	368,971	389,085	758,056
79	Wabash .....		45,699,103	45,699,103
ORE AND FOREST ROADS.				
2	Crawford & Manistee River .....			
4	Hecla & Torch Lake .....			
5	Lake Superior & Ishpeming .....	6,133,769	2,988	6,136,757
6	Lewiston & Southeastern .....		112,130	112,130
8	Quincy & Torch Lake .....		3,335,258	3,335,258
Total .....		1,039,014,229	1,315,039,629	2,354,073,858

COMMISSIONER OF RAILROADS.

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22.—TRAFFIC FOR MICHIGAN.—CONCLUDED.

Ton haul.			Rates.				Road No.
Through miles.	Local miles.	All miles.	Average amount for each ton haul.	Per ton per mile through.	Per ton per mile local.	Per ton per mile, all.	
292.8	82.2	109.2	\$0 72.94	\$0 00.26	\$0 00.88	\$0 00.67	1
7	15	14.9	49	3	3	3	5
57	22.63	27.36	33.78	1.38	1.19	1.12	8
21.96	13.81	19.63	108.42	.46	.91	.55	9
16.01	22.42	17.98	51	3	2.2	2.8	10
199.18	190.11	192.17	190.23	.75	1	.99	12
29	49	49	42.54	1.17	.87	.87	13
111.96	73.41	74.14	79.54	.51	1	1	14
95.5	102	100.2	71	.61	.74	.71	16
53	30.4	36.7	60.42	1.13	2	1.65	17
33.4	23.1	29.5	18.36	.05	.91	.62	18
189	54.5	78.9	93.64	.43	1.77	1.19	19
151.57	76.23	86.50	100.95	.59	1.25	1.16	20
	38	38	71			2	23
132.41	18.41	42.77	52.37	.76	2.12	1.22	24
187.79	77.55	117.07	86.35	.88	1.21	.73	25
5.58	6	5.58	5.54	.97	11.9	.99	26
106.51	106.21	106.29	82	.65	.79	.77	27
	5.82	5.82	14.73		2.53	2.53	30
35.25	32.54	34.57	37	1	1.26	1.06	31
101.9	56.5	58.8	43	.52	.75	.73	33
13	10	8	18	1.2	3.1	2.2	42
	7	7	55		7.8	7.8	43
	25.46	25.46	53	2.06	2.06	2.06	44
27	33.4	33.4	60	2.5	1.8	1.8	45
	26.61	26.61	55.9	2.1	2.1	2.1	46
			50	2	2	2	48
106	53.28	56.58	49.60	.65	.91	.88	49
148	86	117	84	.64	.85	.72	50
	8.26	8.26	59.22		7.17	7.17	65
89	43	69	47	.65	.75	.69	66
	12.44	12.31	40	7	3	3	67
92.1	31.8	33.4	37.4	1.44	2.71	2.61	68
33.99	38.23	37.18	71.74	2.28	1.82	1.93	69
45	21.9	22.21	44.2	3.22	1.95	1.99	70
		22	123		6	6	73
							74
115	41	51.6	78.83	.91	1.76	1.49	77
15.31	9.41	11.53	40	2.3	4.2	3.4	78
		194.3	133.98			.69	79
			24.6	2.4		2.4	2
						.7	4
20.5	14.8	20.43	27	1.3	2.3	1.3	5
10		10	21.3	21.3		21.3	6
6		6	5.1	.85		.85	8
118.53	57.58	74.43	60.2			\$0 00.806	

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## 24.—TONNAGE AND COMMODITIES MOVED, MICHIGAN.

Road No.	Railroads.	Agricultural products. Tons.	Animal products. Tons.	Products of mines. Tons.
1	Ann Arbor .....	149,895	15,125	316,866
2	Arcadia & Betsey River .....	10		
3	Au Sable & Northwestern .....			8
4	Boyer City & Southeastern .....	524	99	
5	Chicago, Detroit & C. G. T. Junction .....	80,153	22,224	44,176
6	Chicago & Grand Trunk .....	399,082	491,014	132,293
7	Chicago, Kalamazoo & Saginaw .....	3,862	1,201	29,808
8	Chicago, Milwaukee & St. Paul .....	1,250	1,150	286,889
9	Chicago & Northwestern .....	14,282	2,144	3,459,396
10	Chicago & West Michigan .....	186,235	19,030	108,712
11	Cincinnati, Jackson & Mackinaw .....	49,086	9,475	126,061
12	Cincinnati, Saginaw & Mackinaw .....	15,610	2,960	39,815
13	Cleveland, Cincinnati, Chicago & St. Louis .....	175,753	3,956	149,500
14	Detroit, Grand Haven & Milwaukee .....	207,309	26,762	79,223
15	Detroit, Lausling & Northern System .....	129,765	24,580	78,306
16	Detroit & Mackinac .....	6,128	5,709	4,502
17	Duluth, South Shore & Atlantic .....	122,885	15,260	1,419,577
18	Flint & Pere Marquette .....	495,533	31,048	175,505
19	Gogebic & Montreal River (Op'd by Wis. Cent.) .....	4,273	338	731,576
20	Grand Rapids & Indiana System .....	235,123	25,231	128,413
21	Hancock & Calumet .....	2,686	31	882,486
22	Indiana & Lake Michigan (Op'd by Terre Haute & I.) .....	36,063	836	11,586
23	Lake Shore & Michigan Southern System .....	792,744	50,802	906,466
24	Lima Northern .....	308	133	7,322
25	Lowell & Hastings .....	4,889	974	1,035
26	Manistee & Grand Rapids .....	280	20	531
27	Manistee & Northeastern and Supplementary .....	6,523	1,408	6,430
28	Manistique .....			
29	Mason & Oceana .....	360	60	
30	Michigan Air Line Railway .....	65,422	3,554	27,479
31	Michigan Central System .....	1,197,569	556,152	1,267,339
32	Midland & Northern .....			
33	Mineral Range .....	16,684	2,707	54,087
34	Minneapolis, St. Paul & Sault Ste. Marie .....	487,244	13,598	410,523
35	Munising .....	1,605	209	1,701
36	Pontiac, Oxford & Northern .....	37,634	4,197	12,364
37	Saginaw, Tuscola & Huron .....	18,448	2,434	46,177
38	Saginaw Valley & St. Louis System .....	1,190	241	1,891
39	South Haven & Eastern .....	4,074	43	684
40	Toledo, Saginaw & Muskegon .....	34,715	3,053	9,068
41	Wisconsin & Michigan .....	10,181	193	150
42	Wabash .....	64,460	26,430	68,067
ORE AND FOREST ROADS.				
43	Crawford & Manistee River .....			
44	Hecla & Torch Lake .....	533		1,429,591
45	Lake Superior & Ishpeming .....			299,336
46	Lewiston & Southeastern .....			
47	Manistee & Luther .....			
48	Quincy & Torch Lake .....			
Total .....		5,050,284	1,366,341	12,752,936

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24.—TONNAGE AND COMMODITIES MOVED.—CONCLUDED.

Forest products. Tons.	Manufac- tures. Tons.	Merchan- dise. Tons.	Other com- modities. Tons.	Total tons.	Total tonnage previous years.	Freight originating on this road. Tons.	Road No.
288,459	115,249	36,800	46,669	969,063	976,143	382,931	1
187	58			255		255	2
140,000				140,000	59,375	140,000	3
36,069	205	40	60	37,025	39,382	36,499	5
22,897	14,813	17,587	65,297	267,147	382,390	174,836	8
87,224	59,336	113,511	205,077	1,477,487	1,347,407	384,368	9
4,169	3,823	7,155	10,756	60,774	45,261	21,881	10
282,500	1,586	4,214	3,044	580,638	456,676	524,691	12
508,990	11,499	11,993	13,550	4,021,854	5,078,089	3,997,266	13
511,296	97,750	112,224	52,120	1,065,367	1,105,110	862,286	14
39,036	39,173	9,634	24,405	296,890	304,502	102,627	16
66,763	6,373	8,059	5,529	145,129	159,689	122,826	17
118,549	24,577	24,841	1,717	504,898	522,501	111,852	18
58,690	32,790	68,066	53,834	528,694	507,045	216,813	19
228,792	52,890	37,890	23,060	580,275	595,750	410,795	20
398,131	18,808	658	4,900	433,896	435,107	433,836	23
479,536	51,252	65,555	118,425	2,272,490	2,062,285	1,994,021	24
418,539	126,993	162,441	195,819	1,605,878	1,528,694	1,040,356	25
6,967	2,023	819	704	746,700	919,555	719,133	26
777,572	149,737	10,628	22,682	1,849,386	1,426,669	817,249	27
25,290	4,580	7,665	196,252	1,118,980	1,089,002	1,118,980	30
16,427	7,425	4,789	1,994	79,110	74,098	19,830	31
299,342	425,972	71,478	136,827	2,683,631	2,497,496	553,278	33
241	1,855			9,919		2,065	42
2,920	284	2,612	829	18,543	12,745	8,022	43
63,312	19	36	77	64,275	57,268	60,494	44
238,987	6,389	1,827	2,569	259,133	342,807	249,777	45
184,623		4,272		188,191	188,191	188,895	46
22,221	45	200		22,576	30,000	22,876	48
33,375	13,056	35,621	35,399	213,906	271,068	148,617	49
1,263,965	1,172,175		282,443	5,739,643	6,479,996	2,641,783	50
7,212	9,726	20,118	13,491	124,025	8,500	124,025	64
268,797	59,329	34,332	15,233	1,284,056	107,387	896,621	65
68,655	5,602	867		78,642	968,606	59,559	66
16,316	4,683	9,954	944	86,092		61,879	67
19,919			8,235	95,264	114,642	90,875	68
13,164	638	1,221	1,121	19,466	68,822	11,503	70
1,580	625	1,269		8,273	7,876	5,556	73
16,287	6,938	2,736	7,412	80,209	82,873	66,886	77
98,977	2,062	5,816	1,926	119,195	66,957	69,617	78
16,179	14,849	16,329	28,873	235,187	242,066	235,187	79
31,147				31,147	24,227	31,147	2
24,920	5,017		561	1,460,622	1,413,880	1,559,622	4
202		18		299,556		291,015	5
11,213				11,213		11,213	6
50,000		1,400		51,400	74,806	51,400	7
555,543				555,543	495,401	555,543	8
7,810,490	2,554,209	914,495	1,586,879	32,035,634	32,750,113	21,560,270	

## 25.—PERMANENT WAY.

Road No.	Railroads.	Fencing.	
		Completed miles. Number.	Required miles. Number.
1	Ann Arbor .....	557	20
2	Armadia & Betsey River .....	19	22
3	Au Sable & Northwestern .....		
5	Boyne City & Southeastern .....		
8	Chicago, Detroit & C. G. T. Junction .....	122.74	
9	Chicago & Grand Trunk .....	456	
10	Chicago, Kalamazoo & Saginaw .....	87	
12	Chicago, Milwaukee & St. Paul .....	38	224
13	Chicago & Northwestern .....	681.74	360.64
14	Chicago & West Michigan .....	894	37
16	Cincinnati, Jackson & Mackinaw .....	330.87	1.11
17	Cincinnati, Saginaw & Mackinaw .....	116	
18	Cleveland, Cincinnati, Chicago & St. Louis .....	70.28	
19	Detroit, Grand Haven & Milwaukee .....	385	
20	Detroit, Lansing and Northern System .....	724.14	
23	Detroit & Mackinac .....	180.5	
24	Duluth, South Shore & Atlantic .....	443.74	486.62
25	Flint & Pere Marquette .....	724.5	56.5
26	Gogebic & Montreal River (Op'd by Wis. Cent.) .....	53.7	
27	Grand Rapids and Indiana System .....	387	46
30	Hancock & Calumet .....	22.80	39.58
31	Indiana & Lake Mich. (Op'd by Terre Haute & I.) .....	45.05	5.05
33	Lake Shore & Michigan Southern System .....	1,143.88	
42	Lima Northern .....		10
43	Lowell & Hastings .....	22	3
44	Manistee & Grand Rapids .....	18	54.42
45	Manistee & Northeastern and Supplementary .....	61.5	89
46	Manistique .....		
48	Mason & Oceana .....	20	7
49	Michigan Air Line Railway .....	215	
50	Michigan Central System .....	2,002.5	70
64	Midland & Northern .....	8	12
65	Mineral Range .....	22	12.80
66	Minneapolis, St. Paul & Sault Ste. Marie .....	223	161
67	Munising .....		50.98
68	Pontiac, Oxford & Northern .....	194.1	5.9
69	Saginaw, Tuscola & Huron .....	133.14	
73	South Haven & Eastern .....	48	25
75	St. Joseph Valley .....	20	
77	Toledo, Saginaw & Muskegon .....	192	
78	Wisconsin & Michigan .....		48
79	Wabash .....	75.19	
ORE AND FOREST ROADS.			
1	Bear Lake & Eastern .....	17	19
2	Crawford & Manistee River .....		
4	Hecla & Torch Lake .....	15	
5	Lake Superior & Ishpeming .....		34
6	Lewiston & Southeastern .....		
7	Manistee & Luther .....		
8	Quincy & Torch Lake .....	12	
Total .....		10,781.37	1,900.60

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25.—PERMANENT WAY.

Maintenance.				Renewals.					Road No.
Trestles replaced with earth work. Linear feet.	Track sections in Michigan. Number.	Average length of sections. Miles.	Average number of men to each section.	New rails laid in Michigan.		Ties.—Number put in during year.			
				Tons.	Miles of track.	Entire line.	In Michigan.	Average per mile in Mich.	
874	46	6.43	4.5	551.5	5.01	183,875	176,458	607	1
	10	6	4	264	8	6,443	6,443	302.2	2
	2	8	4		2				3
	12	5	4			17,330	17,330	299	8
150	45	5	5	10,132	96	204,459	153,342	435	9
	7	6.5	3			5,000	5,000	113	10
276	20	8	3			2,021,806	46,500	810	12
517	85	6.13	4.5	19,242.16	156.19	1,556,597	221,878	809	13
49	108	5.2	3			339,278	325,721	581	14
1,473	27	6.4	3	343.36	3.77	112,318	37,370	329	16
	8	6.72	4			83,121	83,121	389	17
41	5	7.08	4	4,404.17	35.04	731,459	7,927	398	18
	37	5	4	1,327	12	117,235	117,235	454	19
	72	5.5	3	1,258	11.28	196,130	196,130	518	20
	32	9	4			41,596	41,596	140	23
3,586.5	90	5.16	4			180,203	153,820	315	24
	117	7.87	4			397,567	397,567	424.7	25
28.3	3	9.81	4	58	.67	2,630	2,630	161	26
398	97	4.6	2.87	3,297	29.99	261,096	214,227	449	27
	7	4.5	4			5,886	5,886	189	30
16	4	6	3			7,326	4,660	186	31
2,066	104	5.69	4	13,623	109.36	602,277	125,558	418	38
	1	6.5	3			103,072	17,160	2,640	42
	1	12.5	4			5,600	5,600	448	43
	5	9	4			13,091	13,091	170	44
	10	7	4			54,316	54,316	600	45
	6	9.92	4			30,000	30,000	505	46
	4	7	4			9,000	9,000	333	47
350	14	7	4			32,689	32,689	311	48
325	253	4.66	4	3,500	26	646,085	451,042	400	50
	1	10	4			4,251	4,251	244	64
	3	6	4			236,445	69,298	199	65
	27	7.38	4	359.05	319				66
	3	8.47	5						67
120	16	6.26	2			35,238	35,238	352	68
	11	6	3			39,543	39,583	595	69
	6	6	4	105.5	1.5	13,629	13,629	368	73
	1	10	6						75
	12	8	4			31,321	31,321	295	77
	5	6	4			3,065	972	41	78
	12	6.9	7.5				25,879	340	79
	1	18	4						1
	1	10	6			6,000	6,000	600	2
	3	6	6						4
	3	7	5	2,400	20.5	54,120	54,120	2,640	5
	1	10	6	24	.5	10,109	10,109	1,010	6
	4	15	10			7,000	7,000	111	7
370	1	6	8			746	746	124	8
10,609.8	1,338	7.42	4.21	60,888.74	881.81	8,358,992	3,201,431	409.4	

## 26.—HIGHWAY CROSSINGS—NUMBER.

Road No.	Railroads.	At grade.	With gates or flagman.	With electric or automatic signals.	Number over.	Number under.	15 feet above tracks.	Less than 15 feet above tracks.	Total.
1	Ann Arbor .....	384	4	4	7	2	7	—	403
2	Arcadia & Hetsay River .....	23	—	—	—	—	—	—	23
3	An Sable & Northwestern .....	30	—	—	—	—	—	—	30
5	Boyne City & Southeastern .....	8	—	—	—	—	—	—	8
8	Chicago, Detroit & C. G. T. Junction .....	90	28	—	—	—	—	—	90
9	Chicago & Grand Trunk .....	253	18	13	3	2	2	—	267
10	Chicago, Kalamazoo & Saginaw .....	64	1	—	—	—	—	—	64
12	Chicago, Milwaukee & St. Paul .....	46	5	1	—	—	—	—	43
13	Chicago & Northwestern .....	205	19	6	2	7	2	—	214
14	Chicago & West Michigan .....	654	30	1	14	11	13	1	679
16	Cincinnati, Jackson & Mackinaw .....	208	4	—	2	6	2	—	216
17	Cincinnati, Saginaw & Mackinaw .....	96	11	—	—	—	—	—	96
18	Cleveland, Cincinnati, Chicago & St. Louis .....	56	8	1	2	1	2	—	59
19	Detroit, Grand Haven & Milwaukee .....	251	26	2	13	9	10	5	275
20	Detroit, Lansing & Northern System .....	503	21	1	9	11	9	—	525
23	Detroit & Mackinac .....	181	—	—	—	—	—	—	181
24	Duluth, South Shore & Atlantic .....	184	13	3	2	9	2	—	195
25	Fint & Pere Marquette .....	852	36	4	3	9	3	—	874
26	Goebie & Montreal River (operated by Wisconsin Central) .....	5	1	—	—	1	—	—	6
27	Grand Rapids & Indiana System .....	340	43	—	5	2	5	—	367
30	Hamcock & Calumet .....	12	—	—	1	—	1	—	13
31	Indiana & Lake Michigan (operated by Terre Haute & I.) .....	24	—	—	4	—	—	—	28
33	Lake Shore & Michigan Southern System .....	873	60	2	8	7	4	1	895
42	Lima Northern .....	8	—	—	—	—	—	—	8
43	Lowell & Hastings .....	17	—	—	—	—	—	—	17
44	Manistee & Grand Rapids .....	32	—	—	—	—	—	—	32
45	Manistee & Northeastern and Supplementary .....	60	—	1	—	—	—	—	60
46	Manistique .....	4	1	—	—	—	—	—	4
48	Mason & Oceana .....	11	—	—	—	—	—	—	11
49	Michigan Air Line Railway .....	130	3	—	2	—	2	—	132
50	Michigan Central System .....	1,341	138	20	36	17	36	9	1,391
64	Midland & Northern .....	5	—	—	—	—	—	—	5
65	Mineral Range .....	13	3	—	1	1	1	—	20
66	Minneapolis, St. Paul & Sau't Marle .....	51	—	—	—	2	—	—	53
67	Munising .....	4	—	—	—	—	—	—	4
68	Pontiac, Oxford & Northern .....	107	—	—	—	—	—	—	107
69	Saginaw, Tuscola & Huron .....	83	4	—	—	—	—	—	83
70	Saginaw Valley & St. Louis System .....	65	—	—	—	—	—	—	65



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	St. Joseph Valley.....	75 10
76	Toledo, Bagshaw & Munstgen .....	125 3
77	Wisconsin & Michigan.....	3 159
78	Wabash.....	159
79		
	<b>ORE AND FOREST ROADS.</b>	
1	Bear Lake & Eastern .....	13
2	Crawford & Manistee River .....	3
3	Hecia & Torch Lake .....	3
4		
5	Lake Superior & Ishpeming .....	9
6	Lewiston & Southeastern.....	3
7	Quincy & Torch Lake .....	2
8		
Totals .....	7,870	542
		60
		132
		110
		106
		16
		8,102

## 27.—ACCIDENTS.

Road No.	Railroads.	Others killed.	Employees killed.	Miscellaneous.		
				Injured.		
				Passengers.	Employees.	Others.
1	Ann Arbor.....		1		8	
8	Chicago, Detroit & C. G. T. Junction.....		1			
9	Chicago & Grand Trunk.....		3		1	
12	Chicago, Milwaukee & St. Paul.....				3	
13	Chicago & Northwestern.....		2	1	11	
14	Chicago & West Michigan.....					3
16	Cincinnati, Jackson & Mackinaw.....					1
17	Cincinnati, Saginaw & Mackinaw.....					
18	Cleveland, Cincinnati, Chicago & St. Louis.....				1	
19	Detroit, Grand Haven & Milwaukee.....				1	
20	Detroit, Lansing & Northern System.....	2	1	1		
23	Detroit & Mackinac.....				1	
24	Duluth, South Shore & Atlantic.....		4		10	
25	Flint & Pere Marquette.....				7	
26	Gogebic & Montreal River (Op'd by Wis. Cent.).....					
27	Grand Rapids & Indiana System.....		1		11	7
30	Hancock & Calumet.....				1	
31	Indiana & Lake Michigan (Op'd by Terre Haute & I.).....					
33	Lake Shore & Michigan Southern System.....				3	
45	Manistee & Northeastern and Supplementary.....					
50	Michigan Central System.....		2	1	14	1
65	Mineral Range.....				6	
66	Minneapolis, St. Paul & Sault Ste. Marie.....				48	
68	Pontiac, Oxford & Northern.....					
69	Saginaw, Tuscola & Huron.....				1	
77	Toledo, Saginaw & Muskegon.....					
79	Wabash.....					
ORE AND FOREST ROADS.						
5	Lake Superior & Ishpeming.....				5	
6	Lewiston & Southeastern.....				2	
Total.....		2	15	3	185	12

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27.—ACCIDENTS.—CONCLUDED.

Overhead obstructions. Employees injured.	Trespassers on trains.		Trespassers on track.		Total killed.		Total injured.		Total casualties.		Trespassers and tramps.	Drunks.	Suicides.	Responsibility for accident.		Total accidents.	Road No.		
	Others killed.	Others injured.	Others killed.	Others injured.	Passengers.	Employees.	Others.	Passengers.	Employees.	Others.				Passengers.	Employees.			Others.	Clearly accidental.
---	---	---	1	1	---	2	1	---	17	3	---	4	---	---	19	4	23	1	
---	1	2	3	2	---	2	2	---	1	2	---	4	---	---	---	7	7	8	
---	---	1	---	---	---	3	4	---	4	3	---	7	---	---	1	14	9	9	
---	---	---	---	---	---	1	---	---	5	1	---	1	---	---	13	7	12	12	
---	---	---	4	4	---	3	6	2	18	4	2	21	10	8	11	22	33	13	
1	1	2	4	2	---	---	5	3	2	7	3	2	12	9	2	15	17	14	
---	---	1	1	---	---	---	1	---	2	2	---	2	3	---	1	5	5	16	
---	---	---	---	2	---	---	1	---	8	5	---	1	1	---	1	1	1	17	
---	---	---	---	---	---	2	3	---	3	---	---	5	3	---	10	3	18	18	
---	---	---	---	---	---	---	---	---	---	---	---	---	2	---	8	8	19	19	
---	1	2	3	---	1	3	6	1	6	4	2	9	10	4	11	10	21	20	
---	2	3	10	---	---	5	1	---	1	---	---	1	1	---	10	1	2	23	
---	---	---	---	---	---	3	3	---	23	3	---	28	6	---	18	16	34	24	
---	---	---	---	---	---	13	---	---	1	1	---	4	14	7	4	18	18	25	
---	---	---	---	---	---	---	1	---	9	---	1	9	---	10	10	10	10	26	
---	---	3	2	1	---	2	6	6	26	13	6	28	19	14	19	20	53	27	
---	---	---	1	---	---	---	---	---	5	1	---	5	1	1	6	6	30	30	
---	---	3	5	1	---	1	1	---	1	---	---	1	1	---	---	2	2	31	
---	---	---	---	---	---	---	8	---	9	6	---	10	---	---	---	24	33	33	
1	4	6	14	6	1	6	18	4	41	18	1	47	36	30	1	1	45	45	
---	1	1	4	1	---	---	---	---	6	2	---	6	2	2	10	48	38	50	
---	---	---	---	---	---	---	4	---	56	1	---	56	5	---	4	61	66	66	
---	---	---	1	---	---	1	---	---	1	---	---	2	1	---	1	1	2	68	
---	---	---	---	---	---	---	1	---	1	---	---	1	---	---	1	1	2	69	
---	1	1	---	---	---	1	1	---	2	1	---	2	3	2	3	2	77	77	
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	4	5	79	
---	---	---	---	---	---	---	---	---	5	---	---	5	---	---	1	---	5	5	
---	---	---	---	---	---	---	---	---	2	---	---	2	---	---	1	---	2	6	
2	10	26	57	20	2	35	87	19	255	77	21	290	164	102	7	2	133	194	475

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## 28.—ACCIDENTS.

Road number.	Railroads.	Collisions.			Coupling cars.		Derail-	
		Employés killed.	Passengers injured.	Employés injured.	Employés killed.	Employés injured.	Employés killed.	Others killed.
1	Ann Arbor .....					5		
2	Chicago, Detroit & C. G. T. Junction .....							
3	Chicago & Grand Trunk .....					1		
12	Chicago, Milwaukee & St. Paul .....					3		
13	Chicago & Northwestern .....							
14	Chicago & West Michigan .....		1			1		
16	Cincinnati, Jackson & Mackinaw .....			1				
17	Cincinnati, Saginaw & Mackinaw .....							
18	Cleveland, Cincinnati, Chicago & St. Louis .....					1		
19	Detroit, Grand Haven & Milwaukee .....				1	2		
20	Detroit, Lansing & Northern System .....	1		5				
23	Detroit & Mackinac .....							
24	Duluth, South Shore & Atlantic .....	1		3		7		
25	Flint & Pere Marquette .....				2			
26	Gogebic & Montreal River (op'd by Wisconsin Central) .....					1		
27	Grand Rapids & Indiana System .....	1				12		
30	Hancock & Calumet .....					4		
31	Indiana & Lake Michigan (op'd by Terre Haute & I.) .....					1		
33	Lake Shore & Michigan Southern System .....					4		
45	Manistee & Northeastern and Supplementary .....							
50	Michigan Central System .....					14		
66	Minneapolis, St. Paul & Sault Ste. Marie .....							
68	Pontiac, Oxford & Northern .....					1		
71	Toledo, Saginaw & Muskegon .....							
79	Wabash .....					1		
	Totals .....	3	1	9	3	60		

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23.—ACCIDENTS.—CONCLUDED.

ments.		Falling from trains.					Getting on and off trains.					Highway crossings.				Road number.
Passengers injured.	Employés injured.	Passengers killed.	Employés killed.	Others killed.	Passengers injured.	Employés injured.	Passengers killed.	Employés killed.	Others killed.	Passengers injured.	Others injured.	Others killed.	Passengers injured.	Employés injured.	Others injured.	
	1		1			2					1				3	1
			1			1					1				1	8
			1													9
	1					2				1	1	2				12
																13
						1				2						14
												1				16
	1					3					2				2	17
			1									1				18
		1	1							1		2			2	19
																20
			1							1		2			2	23
						3										24
			1			1					3				1	25
	1									1						26
5	2			1	1	2						3			1	27
																30
			1			1					1	3			2	31
					1											33
																45
		1	3		1	12		1		2					5	50
	8		1							1						66
			1													68
						1						1				77
																79
5	14	2	13	1	3	29		1		8	10	14			17	

## 25.—CLASSIFICATION OF EMPLOYÉS KILLED AND INJURED.

Road No.	Railroads.	Baggage-men.	Brakemen.	Conduc-tors.
1	Ann Arbor.....	7	1	1
8	Chicago, Detroit & C. G. T. Junction.....	1	1	1
9	Chicago & Grand Trunk.....	5	5	1
12	Chicago, Milwaukee & St. Paul.....	8	8	2
13	Chicago & Northwestern.....	2	2	1
14	Chicago & West Michigan.....	2	2	1
16	Cincinnati, Jackson & Mackinaw.....	2	2	4
18	Cleveland, Cincinnati, Chicago & St. Louis.....	8	8	1
19	Detroit, Grand Haven & Milwaukee.....	4	4	1
20	Detroit, Lansing & Northern System.....	11	11	2
23	Detroit & Mackinac.....	1	1	1
24	Duluth, South Shore & Atlantic.....	1	1	1
25	Flint & Pere Marquette.....	1	1	1
26	Gogebic & Montreal River (Op'd by Wis. Cent.).....	15	15	1
27	Grand Rapids & Indiana System.....	5	5	1
30	Hancock & Calumet.....	1	1	1
31	Indiana & Lake Michigan (Op'd by Terre Haute & I.).....	7	7	1
33	Lake Shore & Michigan Southern System.....	25	25	1
50	Michigan Central System.....	1	2	1
65	Mineral Range.....	1	11	1
66	Minneapolis, St. Paul & Sault Ste. Marie.....	2	2	1
68	Pontiac, Oxford & Northern.....	1	1	1
69	Saginaw, Tuscola & Huron.....	1	1	1
77	Toledo, Saginaw & Muskegon.....	1	1	1
79	Wabash.....	1	1	1
ONE AND FOREST ROADS.				
5	Lake Superior & Ishpeming.....	1	1	1
6	Lewiston & Southeastern.....	1	1	1
Total.....		14	101	12

COMMISSIONER OF RAILROADS.

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28.—CLASSIFICATION OF EMPLOYÉS KILLED AND INJURED.—CONCLUDED.

Engineers.	Firemen.	Laborers.	Shopmen.	Yardmen.	Unclassi- fied.	Total killed.	Total injured.	Total number.	Road No.
-----	1	6	-----	-----	3	2	17	19	1
-----	1	1	-----	-----	2	2	1	3	8
-----	1	1	-----	-----	-----	3	4	7	9
1	-----	-----	-----	5	-----	1	5	6	12
2	3	3	3	4	-----	2	18	20	13
-----	-----	-----	-----	-----	-----	-----	2	2	14
-----	-----	-----	-----	-----	3	1	4	5	16
1	1	-----	-----	-----	-----	-----	8	8	18
-----	-----	1	-----	-----	1	2	3	5	19
2	2	-----	-----	-----	-----	3	6	9	10
-----	-----	1	-----	-----	-----	-----	1	1	23
-----	-----	7	-----	3	5	5	23	28	24
-----	-----	1	-----	1	-----	3	1	4	25
-----	-----	4	-----	3	-----	-----	9	9	26
1	1	5	-----	4	2	2	26	28	27
-----	-----	-----	-----	-----	-----	-----	5	5	30
-----	-----	-----	-----	-----	-----	-----	1	1	31
1	-----	1	-----	-----	1	1	9	10	33
-----	-----	1	-----	14	5	6	40	46	50
-----	-----	-----	-----	-----	3	-----	6	6	65
1	1	29	5	7	1	-----	56	56	66
-----	-----	1	-----	-----	-----	1	1	2	68
-----	-----	-----	-----	-----	-----	-----	1	1	69
-----	1	-----	-----	1	-----	1	-----	1	77
-----	-----	-----	-----	-----	-----	-----	2	2	79
-----	-----	4	-----	-----	1	-----	5	5	5
-----	1	1	-----	-----	-----	-----	2	2	6
9	12	66	8	42	27	35	236	291	

## RAILROAD MILEAGE.

	1892. Miles.	1893. Miles.	1894. Miles.	1895. Miles.	1896. Miles.
Road owned by companies doing business in Michigan.....	15,131.59	20,089.40	20,004.72	22,501.45	22,703.52
Road operated by companies doing business in Michigan.....	17,144.35	22,993.13	23,010.81	24,847.52	25,045.14
Road owned in Michigan.....	7,447.97	7,511.83	7,512.50	7,609.87	7,759.08
Road operated in Michigan.....	7,497.72	7,572.24	7,565.08	7,610.43	7,765.72
Length of main track in Michigan.....	7,447.87	7,511.83	7,512.50	7,609.87	7,759.08
Length of second and side track in Michigan.....	2,132.08	2,177.64	2,217.65	2,277.28	2,189.07
Total, estimated as single track.....	9,579.45	9,689.47	9,730.15	9,887.15	9,948.15
Increase over previous years.....	172.41	74.76	.67	97.87	150.47

## CAPITAL STOCK.

	1892.	1893.	1894.	1895.	1896.
Total capital stock paid in.....	\$372,761,847 00	\$431,973,001 97	\$431,880,117 19	\$436,195,233 19	\$436,910,564 76
Amount held in Michigan.....	\$12,974,408 23	\$12,182,362 59	\$11,358,393 31	\$10,885,374 97	\$11,148,289 97
Total number of stockholders.....	16,627	21,233	23,255	23,351	24,509
Number in Michigan.....	1,038	1,076	1,144	1,161	1,202

## COST OF ROADS COMPARED WITH STOCK AND DEBT.

	1892.	1893.	1894.	1895.	1896.
Total capital stock paid in.....	\$372,761,847 00	\$431,973,001 97	\$431,880,117 19	\$436,195,233 19	\$436,910,564 76
Total funded debt.....	418,203,945 12	608,113,355 62	609,895,267 35	611,150,386 45	601,026,887 21
Total unfunded debt.....	32,642,022 35	40,810,372 11	42,269,390 31	54,711,770 62	54,834,169 61
Total debt.....	490,845,967 47	648,923,727 73	652,164,657 66	665,862,167 07	655,860,856 82
Total stock and debt.....	\$863,607,814 47	\$1,078,896,729 70	\$1,083,544,744 85	\$1,102,057,400 26	\$1,092,771,421 58
Proportion of cost for Michigan.....	\$14,331,228 55	\$1,019,700,828 66	\$1,024,767,563 08	\$1,031,493,103 80	\$1,026,861,867 64
Capital stock paid in per mile of road.....	295,629,911 93	298,992,936 64	300,670,020 45	301,003,143 44	303,185,907 91
Debt per mile of road.....	24,631 42	20,580 53	20,537 29	19,265 34	18,813 67
Stock and debt per mile of road.....	32,434 20	30,821 45	31,048 48	27,973 44	28,427 77
Stock and debt per mile of road.....	57,065 62	51,401 98	51,595 77	47,238 78	47,492 60
Cost per mile of road.....	53,810 84	48,581 68	48,787 49	45,841 13	45,283 80



COMPARATIVE TRAFFIC AND REVENUE.

	1892.	1893.	1894.	1895.	1896.
Passengers carried .....	40,385,149	53,916,571	45,712,632	47,243,450	44,788,883
Passenger mileage .....	31,294,241	40,847,816	48,366,730	47,556,837	45,526,836
Passenger revenue .....	\$33,824,420 07	\$61,023,624 23	\$41,319,315 96	\$43,079,700 74	\$43,083,537 23
Tons of freight hauled .....	75,642,091	79,649,132	74,148,422	83,618,832	82,788,499
Freight mileage .....	52,485,870	72,645,193	63,861,227	67,285,241	63,474,414
Freight revenue .....	\$76,413,040 20	\$93,009,892 42	\$90,116,339 23	\$99,163,627 90	\$99,932,038 78
Gross earnings .....	111,808,191 54	146,618,639 25	131,432,232 95	144,484,148 16	144,634,017 50
Operating expenses .....	78,946,333 42	105,054,079 34	93,601,237 16	99,622,175 50	101,603,797 23
Net earnings .....	32,861,858 12	41,572,559 91	38,830,995 79	44,861,972 66	43,030,220 27
Total income .....	112,668,800 79	147,887,831 40	135,109,745 02	145,649,130 71	145,604,562 61
Total expenditures .....	104,224,360 71	138,069,505 31	129,703,435 40	133,046,107 58	145,373,341 40
Surplus for the year .....	\$8,444,420 08	\$9,818,325 09	\$6,406,309 62	\$12,603,023 13	\$231,221 21

PASSENGER MILEAGE.

	1892.	1893.	1894.	1895.	1896.
Number of passengers carried .....	40,385,149	53,916,571	45,712,632	47,243,450	44,788,883
Average journey (miles) .....	32.51	43.25	32.85	34.03	34.86
Average rate per mile .....	\$0 02 18	\$0 01 87	\$0 02 20	\$0 02 13	\$0 02 13
Total passenger mileage .....	1,311,866,019	2,331,976,030	1,501,614,565	1,606,584,611	1,562,353,996

FREIGHT MILEAGE.

	1892.	1893.	1894.	1895.	1896.
Number of tons of freight hauled .....	75,642,091	79,649,132	74,148,422	83,618,832	82,788,499
Average haul (miles) .....	140.78	133.22	146.62	149.16	153.89
Average rate per ton per mile .....	\$0 00 72	\$0 00 76	\$0 00 82	\$0 00 79	\$0 00 78
Total freight mileage .....	10,643,956,703	12,203,928,890	10,866,587,752	12,472,334,620	12,740,432,706

## ANNUAL REPORT OF THE

## TRAIN MILEAGE.

	1892.	1893.	1894.	1895.	1896.
Passenger trains .....	31,294,241	46,847,816	43,366,739	44,556,837	45,526,896
Freight trains .....	52,485,870	72,645,193	63,361,227	67,283,241	63,474,414
Total, all trains .....	83,780,111	119,493,009	107,227,966	111,842,078	113,057,984

## COMPARATIVE TABLE OF EXPENSES TO EARNINGS.

	1892.	1893.	1894.	1895.	1896.
Earnings per mile of road .....	\$7,444 96	\$7,836 59	\$6,753 89	\$6,472 89	\$6,413 30
Operating expenses per mile of road .....	6,079 22	6,004 81	5,636 63	5,354 50	6,402 22
Operating expenses, per cent of earnings .....	92	90	96	91	99
Earnings per train mile .....	\$1 34	\$1 23	\$1 28	\$1 30	\$1 28
Operating expenses per train mile .....	1 24	1 15	1 20	1 18	1 26

## ROLLING STOCK.

	1892.	1893.	1894.	1895.	1896.
Total number of locomotives .....	3,841	4,781	4,827	4,664	4,647
Total number of cars .....	131,709	163,407	155,625	153,358	154,058

## EMPLOYÉES AND STATIONS.

	1892.	1893.	1894.	1895.	1896.
Total number of employes .....	82,981	100,963	89,586	88,325	100,598
Total number of stations .....	3,877	4,642	4,629	4,695	4,759

## PERMANENT WAYS.

	1892.	1893.	1894.	1895.	1896.
Trestles replaced with earthwork .....	10,167	15,407	19,438	20,557	10,669
Culverts replaced .....	432	619	445	403	562
Number of new ties put in track .....	5,648,245	5,781,277	4,784,289	6,666,840	8,358,992

## CROSSINGS, NUMBER.

	1892.	1893.	1894.	1895.	1896.
Railroad crossings at grade .....	338	350	356	356	340
Railroad crossings over or under .....	42	44	44	46	55
Railroad crossings, total .....	380	394	400	402	395
Highway crossings at grade .....	7,477	7,449	7,560	7,669	7,870
Highway crossings over or under .....	234	215	213	211	242
Highway crossings, total .....	7,711	7,664	7,773	7,880	8,112
Highway crossings with gates or signals .....	589	510	514	530	602

# COMMISSIONER OF RAILROADS

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## COMPARATIVE TABLE OF EARNINGS.

Years.	Gross earnings.	Miles of road.	Earnings per mile.
1887.....	\$30,439,920 86	5,768.41	\$5,285 66
1888.....	30,161,504 81	6,411.66	4,704 16
1889.....	34,001,787 15	6,759.55	5,030 18
1890.....	36,165,108 96	6,957.27	5,198 17
1891.....	36,292,596 86	7,274.94	5,062 81
1892.....	38,663,208 94	7,447.87	5,194 21
1893.....	36,432,718 97	7,511.88	4,850 08
1894.....	29,522,975 71	7,512.50	3,929 84
1895.....	29,211,014 48	7,606.61	3,839 20
1896.....	29,577,535 27	7,759.06	3,811 97

## ACCIDENTS.

Years.	Killed.				Injured.				Total casualties.
	Passengers.	Employees.	Others.	Total.	Passengers.	Employees.	Others.	Total.	
1887.....	2	62	78	142	32	251	87	370	512
1888.....	7	63	90	160	21	256	88	365	522
1889.....	8	60	110	178	26	282	86	394	572
1890.....	7	75	150	232	53	491	93	637	869
1891.....	5	52	118	175	47	356	112	515	689
1892.....	6	78	88	167	45	463	111	619	786
1893.....	46	58	96	200	127	362	77	566	766
1894.....	2	37	90	129	17	169	78	264	393
1895.....	4	32	100	136	13	215	72	300	436
1896.....	2	35	87	124	14	235	82	351	475

## COMPARATIVE TABLE OF EARNINGS AND EXPENSES.

State.	Gross earnings, year ending June 30, 1896.	Operating expenses.	Percentage of operating expenses compared with gross earnings.
Wisconsin.....	\$33,575,970 97	\$19,990,609 99	59.53
Illinois.....	78,158,760 00	49,524,677 05	63.11
Minnesota.....	39,398,128 00	20,544,124 00	52.14
Iowa.....	33,355,823 63	24,681,428 28	73.99
Ohio*.....	74,720,707 11	49,790,535 43	66.63
Michigan.....	29,577,535 27	24,378,492 96	82.42

\* Entire line.

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TABULATED STATEMENT OF RAILROAD ACCIDENTS IN MICHIGAN REPORTED TO THE COMMISSIONER OF RAILROADS DURING THE  
LAST TEN YEARS.

Years.	General summary of accidents.							To passengers.		To employes.								At grade crossings.		To trespassers.					
	Total number of injuries to persons.	To passengers.	To employes.	At grade crossings.	To trespassers.	Fatal injuries.	Injuries not fatal.	Killed.	Injured.	To trainmen.	To other employes.	Coupling cars.	By train accident.	Falling from trains and engines.	From other causes.	Overhead bridges.	Total killed.	Total injured.	Killed.	Injured.	Unlawfully on track.	Unlawfully on cars.	Killed.	Injured.	Bulldozes.
1887.....	512	34	306	42	108	142	370	2	32	197	123	141	22	40	96	7	66	255	15	27	72	36	60	48	39
1888.....	523	28	319	41	125	160	363	7	21	196	131	154	27	47	90	1	69	257	19	22	83	42	64	61	1
1889.....	573	34	342	45	120	178	395	8	26	215	192	159	22	43	113	5	91	316	24	21	100	20	81	39	3
1890.....	869	60	588	48	170	232	687	7	53	328	262	223	64	58	230	3	82	506	29	19	143	27	111	59	0
1891.....	690	52	407	44	154	175	515	5	47	246	167	173	42	49	139	4	52	353	26	18	106	48	81	73	0
1892.....	786	51	536	31	149	167	619	6	45	277	238	240	14	54	227	1	73	463	8	23	115	31	75	74	5
1893.....	766	173	430	34	124	200	566	46	127	238	182	171	48	48	165	2	58	362	20	14	104	20	72	52	2
1894.....	398	19	226	30	95	129	264	2	17	100	106	58	17	23	127	1	37	169	16	14	71	24	58	37	6
1895.....	426	17	241	20	128	136	300	4	13	138	114	86	8	29	123	1	32	215	12	18	95	33	83	45	4
1896.....	475	21	290	31	102	124	351	2	19	148	116	60	43	42	23	2	35	256	15	17	77	36	67	46	2

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REPORTS OF  
RAILROAD COMPANIES

1896

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# ANNUAL REPORT OF THE ANN ARBOR RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed April 22, 1897.]

## OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, WELLINGTON R. BURT, Toledo, Ohio.  
*Vice President*, GEO. W. QUINTARD, New York, N. Y.  
*Secretary*, DANIEL C. TATE, New York, N. Y.  
*Auditor*, F. GOSSMAN, Toledo, Ohio.  
*Treasurer*, DANIEL C. TATE, New York, N. Y.  
*General Manager*, HENRY W. ASHLEY, Toledo, Ohio.  
*Superintendent*, W. F. BRADLEY, Durand, Mich.  
*Chief Engineer*, G. A. NETTLETON, Toledo, Ohio.  
*General Passenger Agent*, W. H. BENNETT, Toledo, Ohio.  
*General Freight Agent*, W. H. BENNETT, Toledo, Ohio.  
*Attorney*, ALEX. L. SMITH, Toledo, Ohio.

## DIRECTORS.

GEO. W. QUINTARD, New York, N. Y.  
 FRANKLIN B. LORD, New York, N. Y.  
 A. W. WRIGHT, Alma, Mich.  
 WM. C. MCCLURE, Saginaw, Mich.  
 E. W. TOLLESTON, Toledo, Ohio.  
 Terms expire September, 1897.  
 AMOS F. ENO, New York, N. Y.  
 ROBERT D. MURRAY, New York, N. Y.  
 JOHN JACOB ASTOR, New York, N. Y.  
 BENJ. PERKINS, New York, N. Y.  
 WELLINGTON R. BURT, SAGINAW, Mich.  
 Terms expire September, 1898.  
 J. EDWARD SIMMONS, New York, N. Y.  
 H. W. ASHLEY, Toledo, Ohio.  
 R. C. MARTIN, New York, N. Y.  
 Terms expire September, 1899.

## STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: September 21, 1895.  
 Number of stockholders at date of last election: 740.  
 Number of stockholders in Michigan at same date: 3.  
 Amount of full paid stock held in Michigan at same date: \$2,596.  
 Date of annual meeting of stockholders: Third Saturday of September, annually.  
 Fiscal year of company ends June 30.  
 General offices of the company are located at Toledo, Ohio.

## GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$1,170,750 35
Total expenses, including taxes.....	\$1,183,459 87	
Net deficit.....	\$12,709 52	
Interest on unfunded debt.....	6,664 46	
Balance for the year.....	\$19,373 98	
Balance (profit and loss) last year.....		\$4,443 55
Items not included in above.....		8,612 71
Balance forward to next year.....	\$6,312 72	

# ANN ARBOR RAILROAD COMPANY.

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## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$7,250,000 00
Par value of shares .....	\$100 00	
Number of shares issued .....	72,500	
Amount paid in on common .....		\$3,250,000 00
Amount paid in on preferred .....		4,000,000 00
Total amount paid in as per books of the company .....		\$7,250,000 00
Paid in per mile of road owned by company, 298.80 miles.....		24,263 72

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage gold, July 1, 1895.....	4%	1995.....	New York.....	\$7,000,000 00

### UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated.	Amount.
For current balances.....		\$331,826 03

### RECAPITULATION.

Total funded debt.....	\$7,000,000 00
Total unfunded debt.....	331,826 03
Total debt liabilities.....	\$7,331,826 03
Amount of debt liabilities per mile of road, 298.80 miles.....	24,537 55
Total amount of stock and debt.....	14,581,826 03
Stock and debt per mile of road, 298.80 miles.....	48,801 30

## GENERAL BALANCE SHEET.—Dr.

Construction account.....	\$13,403,233 48
Equipment account.....	933,633 90
	\$14,336,867 38
Cash items:	
Cash.....	\$11,142 74
Due from agents.....	55,850 54
	66,993 28
Other assets:	
Materials and supplies.....	\$36,653 98
Debit balances from companies and individuals.....	48,311 35
W. R. Burt, receiver.....	82,284 87
T. A. A. & N. M. Ry. ....	1,402 45
	171,652 65
Income account .....	6,812 72
Total.....	\$14,581,826 03

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$7,250,000 00
Funded debt.....	7,000,000 00
Unfunded debt:	
Notes payable.....	\$100,000 00
Vouchers and accounts.....	208,139 15
Other liabilities (list as follows):	
State of Michigan (accrued taxes).....	22,686 88
	331,826 03
Total.....	\$14,581,826 03

## MICHIGAN RAILROAD RETURNS, 1896.

## COST OF ROAD AND EQUIPMENT.

## PURCHASED BY PRESENT COMPANY.

When purchased: July 2, 1895.	
Original cost to present company of road and equipment.....	\$14,336,867 38
Total cost to date of report.....	\$14,336,867 38
Average cost per mile of road (not including sidings) 302.73 miles.....	<u>47,358 59</u>

## ANALYSIS OF EARNINGS.—IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

Main line and branches:		
Local fares.....	\$223,490 09	
Through fares.....	963 93	
Total passenger fares.....	<u>\$224,454 02</u>	
Express and baggage.....	20,210 68	
Mails.....	38,293 72	
Total passenger department earnings.....		\$282,960 42
Per train mile.....	\$0 68.22	
Per mile of road.....	<u>963 60</u>	

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic.....	\$612,758 29	
Through traffic.....	94,849 92	
Total traffic.....	<u>\$707,608 21</u>	
Total freight department earnings.....		707,608 21
Per train mile.....	\$1 44.39	
Per mile of road.....	<u>2,384 69</u>	

## ANALYSIS OF EARNINGS.—ENTIRE LINE.

## PASSENGER EARNINGS.

Main line and branches:		
Local fares.....	\$229,282 86	
Through fares.....	963 50	
Total passenger fares.....	<u>\$230,246 36</u>	
Express and baggage.....	20,570 68	
Mails.....	38,952 84	
Total passenger department earnings.....		<u>\$289,769 88</u>
Per train mile.....	\$0 67.83	
Per mile of road.....	<u>957 25</u>	

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic.....	\$638,698 75	
Through traffic.....	85,180 17	
Total traffic.....	<u>\$723,878 92</u>	
Total freight department earnings.....		<u>\$723,878 92</u>
Per train mile.....	\$1 42.78	
Per mile of road.....	<u>2,391 17</u>	
Total transportation earnings, entire line.....		\$1,125,215 46
Transportation earnings per mile of road, boat earnings deducted.....	<u>\$3,345 42</u>	
Transportation earnings per train mile, boat earnings deducted.....	<u>\$1 08.55</u>	



## ANN ARBOR RAILROAD COMPANY.

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Miscellaneous receipts from operating account, other than for transportation,  
as follows:

From car mileage balance.....	\$12,138 53
From telegraph companies.....	3,010 73
From rents of tracks, yards and terminals.....	25,867 25
From rents not otherwise provided for.....	1,280 35
From other sources.....	3,438 03

Total.....\$45,534 89

Total earnings from operation of road.....\$1,170,750 35

Total earnings per mile of road, less boat earnings.....	\$3,496 83	
Total earnings per train mile, less boat earnings.....	1 12.39	
Proportion of taxable earnings for Michigan.....	1,026,167 27	
Total taxable earnings per mile of road in Michigan.....	3,458 26	
Total income from all sources.....		1,170,750 35
Proportion of income for Michigan.....		1,026,167 27

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway.....	\$273,033 27
Renewals of rails.....	19,664 59
Renewals of ties.....	24,506 42
Repairs and renewals of bridges and culverts.....	22,979 29
Repairs and renewals of fences, road crossings, signs and cattle guards.....	11,372 68
Repairs and renewals of buildings and fixtures.....	94,475 84
Repairs and renewals of docks and wharves.....	29,792 22
Repairs and renewals of telegraph.....	5,138 49
Stationery and printing.....	593 38
Other expenses.....	91 63

Total.....\$481,648 81

## MAINTENANCE OF EQUIPMENT.

Superintendence.....	\$9,769 83
Repairs and renewals of locomotives.....	37,491 19
Repairs and renewals of passenger cars.....	15,673 06
Repairs and renewals of freight cars.....	63,931 56
Repairs and renewals of work cars.....	6,475 80
Repairs and renewals of marine equipment.....	38,395 87
Repairs and renewals of shop machinery and tools.....	8,406 15
Stationery and printing.....	443 40
Other expenses.....	37 89

Total.....\$180,626 25

## CONDUCTING TRANSPORTATION.

Superintendence.....	\$14,902 00
Engine and roundhouse men.....	72,180 58
Fuel for locomotives.....	81,592 40
Water supply for locomotives.....	3,015 55
Oil, tallow and waste for locomotives.....	2,432 05
Other supplies for locomotives.....	885 83
Train service.....	54,558 30
Train supplies and expenses.....	5,658 79
Switchmen, flagmen and watchmen.....	28,824 77
Telegraph expenses.....	16,725 29
Station service.....	55,346 28
Station supplies.....	3,255 76
Switching charges—Balance.....	9,312 99
Car mileage—Balance.....	1,858 20
Loss and damage.....	7,570 43
Injuries to persons.....	2,969 26
Clearing wrecks.....	2,224 83
Operating marine equipment.....	51,690 73
Advertising.....	1,103 00
Outside agencies.....	7,145 46
Rents for tracks, yards and terminals.....	8,998 05
Rents of buildings and other property.....	2,153 83
Stationery and printing.....	6,171 34
Other expenses.....	761 25

Total.....\$441,352 95

## MICHIGAN RAILROAD RETURNS, 1896.

## GENERAL EXPENSES.

Salaries of general officers.....	\$20,754 04
Salaries of clerks and attendants.....	11,347 50
General office expenses and supplies.....	2,440 30
Insurance.....	7,686 88
Law expenses.....	3,900 66
Stationery and printing (general offices).....	2,430 25
Other expenses.....	2,213 87
Taxes.....	29,056 86
<b>Total.....</b>	<b>\$79,831 86</b>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	40.69	\$481,648 81
Maintenance of equipment.....	15.27	180,626 25
Conducting transportation.....	37.29	441,352 95
General expenses, including taxes.....	6.75	79,831 86
<b>Total operating expenses and taxes.....</b>	<b>100.00</b>	<b>\$1,183,459 87</b>
Operating expenses and taxes per mile of road.....		\$3,909 29
Operating expenses and taxes per train mile run, for trains earning revenue, 934.213 miles.....	\$1 26.68	
Proportion of operating expenses and taxes for Michigan, main line.....		1,160,027 36
<b>Total proportion of expenses for Michigan.....</b>		<b>\$1,160,027 36</b>
Percentage of expenses to earnings.....	101.08	
Net earnings per mile of road, none.		
Net earnings per train mile, none.		

## DESCRIPTION OF ROAD.

Date when road was opened for use between its present termini:  
From Toledo, Ohio, to Frankfort, Michigan, November 17, 1889.

## MAIN LINE.

	Miles.	Miles.
In Michigan, from State line to Frankfort, Mich. ....	289.89	
In Ohio, from State line to Toledo, Ohio.....	6.00	
<b>Total length completed.....</b>		<b>295.89</b>

## BRANCHES.

From main line to Ithaca.....	1.61	
From main line to St. Louis.....	1.42	
From main line to Pine river.....	1.00	
From main line to Ross mill.....	1.52	
From main line to Diggins mill.....	1.29	
<b>Total length of branches owned by company.....</b>		<b>6.84</b>
<b>Total length of branches owned by company in Michigan.....</b>	<b>6.84</b>	
<b>Total length of road belonging to this company.....</b>		<b>302.73</b>
Total length of road belonging to this company in Michigan.....		296.78
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated.....		53.57
<b>Aggregate length of tracks in Michigan belonging to this company, computed as single track.....</b>		<b>350.30</b>

Gauge of track, 4 feet 8½ inches.

## Number of bridges and trestles in Michigan.

	Number.	Aggregate length, feet.
Wooden bridges.....	3	116
Stone bridges.....	3	20
Iron bridges.....	27	2,044
Combination bridges.....	3	243
Wooden trestles.....	55	3,813
<b>Total.....</b>	<b>91</b>	<b>6,336</b>

*Crossings—railroad and highway.*

What railroads cross your road at grade in this State, and at what locality?

Lake Shore & Michigan Southern R. R. at Monroe Junction, Dundee & Pittsfield.  
 Wabash R. R. at Milan.  
 Detroit, Lansing & Northern R. R. at Howell Junction & St. Louis.  
 Detroit, Grand Haven & Milwaukee R. R. at Durand.  
 Chicago & Grand Trunk R. R. at Durand.  
 Flint & Pere Marquette R. R. at Clare.  
 Grand Rapids & Indiana R. R. at Cadillac.  
 Michigan Central R. R. at Owosso.  
 Cumber Lumber Co. R. R. at Cadillac.  
 Manistee & North Eastern R. R. at Copemish.  
 Chicago & West Michigan R. R. at Thompsonville.

What railroads cross your road either over or under your grade in this State, and where?

Under:

Michigan Central R. R. at Ann Arbor.

At what crossings are interlocking and derailing switches in operation?

M. A. L. at Hamburg Junction.  
 D., L. & N. at Howell.  
 C. & G. T. and D., G. H. & M. at Durand.  
 M. C. at Owosso.  
 F. & P. M. at Clare.  
 G. R. & I. at Cadillac.  
 C. & W. M. at Thompsonville.

What pattern or patterns have you adopted?

Union Switch and Signal, Allentown.

Number of crossings of highways at grade in this State .....	394
Number of crossings of highways at grade in this State at which there are gates or flagmen .....	4
Number of crossings at which there are electric or automatic signals .....	4

What pattern or patterns in use?

O'Neill's.

Number of crossings of highways over or under railroad: over, 7; under, 2.

Number of highway bridges 18 feet above track .....	7
-----------------------------------------------------	---

Have safety guards been erected at overhead obstructions?

Yes.

Are your frogs and guard rails blocked as required by act 174, session laws of 1883?

Yes.

How are they treated?

Blocked by wood or patent iron filling.

*Stations.*

Number of stations on whole lines .....	68
Same in Michigan .....	64

*Employés.*

Number of persons regularly employed on all roads operated by company, including officials .....	889
Same in Michigan .....	747

Classify your employés as per following list:

	Number.
Baggagemen .....	6
Brakemen .....	57
Conductors .....	28
Engineers .....	46
Firemen .....	46
Laborers .....	208
Shopmen .....	214
Yardmen .....	44
Others .....	225

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you .....	557
------------------------------------------	-----

Give the number of miles required to complete fence both sides of your track in Michigan, and the counties in which needed:

Clare and Benzie .....	20
------------------------	----

## MICHIGAN RAILROAD RETURNS, 1896.

*Road bed and track.*

Number of track sections in Michigan .....	46
Average lengths of sections, miles .....	6.43
Average number of men in each section gang .....	4.5
Number of new ties put in whole line during the year .....	183,875
Number of new ties put in track in Michigan .....	176,458
Average number of new ties per mile of road .....	607
New rails put in track:	
Steel, tons, 551 1010-2040, miles .....	1,998
Total miles of track laid with new rails .....	5.01

*Bridges and culverts.*

Amount of trestle work replaced with earth during the year (linear feet) ..... 874

New bridges built during the year—number, 13.

Location.	Kind.	Material.	Month built.	feet in length.
Between Dundee and Azalia .....	Deck girder .....	Iron and wood .....	March .....	208
Between Milan and Urania .....	Deck girder .....	Iron .....	May .....	20
Between Milan and Urania .....	Deck girder .....	Iron and wood .....	April .....	148
Between Milan and Urania .....	Deck girder .....	Iron and wood .....	November .....	7
Between Ann Arbor and Whitmore Lake .....	Deck girder .....	Iron .....	November .....	20
Between Hamburg and Hamburg Junction .....	Deck girder .....	Iron .....	January .....	20
Between Hamburg and Hamburg Junction .....	Through girder .....	Iron .....	January .....	126
At Hamburg Junction .....	Through girder .....	Iron .....	January .....	20
Between Hamburg Junction and Pettysville .....	Through girder .....	Iron .....	January .....	20
Between Pettysville and Chilson .....	Through girder .....	Iron .....	April .....	10
Between Pettysville and Chilson .....	Through girder .....	Iron .....	April .....	12
Between Corunna and Owosso .....	Through girder .....	Iron .....	November .....	12
Between Thompsonville and Crystal Lake .....	Through girder .....	Iron and wood .....	December .....	98

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender .....	41	\$123,100 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender .....	2	3,200 00
Total .....	43	\$126,300 00
Number of passenger cars—12-wheel, including official cars .....	23	\$46,851 59
Number of express and baggage cars .....	5	14,440 40
Number of box freight cars .....	1,337	346,474 22
Number of platform cars .....	404	51,399 48
Number of conductors' way cars .....	28	5,444 40
Other cars as follows:		
2 steam shovels, 1 pile driver, 3 snow plows, 5 relief, 1 derrick, 2 tool .....	14	6,161 88
Total .....	1,809	\$600,071 97
Number of locomotives equipped with power brakes .....	42	
Number of passenger-train cars equipped with power brakes .....	28	
Number of freight cars equipped with power brakes .....	727	

What patterns of power brakes have you in use, and number of locomotives and cars with each?  
23 passenger cars, Westinghouse; 83 locomotives, Westinghouse.

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?  
953 box cars are.

What pattern or patterns have you adopted for use?  
Trojan.

How are your passenger cars heated?  
Steam from engines (Commingler system).

## ANN ARBOR RAILROAD COMPANY.

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## MILEAGE, TRAFFIC, ETC.

*Train mileage.*

	Entire lines. In Michigan.	
Miles run by passenger trains during the year.....	427,218	414,763
Miles run by freight trains during the year.....	506,995	490,045
Total mileage of trains earning revenue.....	934,213	904,807

*Passenger traffic.—Entire lines.*

	Numbers.	Miles.	Rate.
Number of through passengers carried, earning revenue.....	158		
Number of local passengers carried, earning revenue.....	303,544		
Total number of passengers carried earning revenue.....	304,002		
Number of passengers carried one mile.....	10,669,180		
Average distance carried.....		35.09	
Average amount received from each passenger.....			\$0 75.70
Average receipts per mile for through passengers.....			02.05
Average receipts per mile for local passengers.....			02.15
Average receipts per passenger per mile for all passengers.....			02.16

*Passenger traffic.—In State of Michigan.*

Number of through passengers carried, earning revenue.....	158		
Number of local passengers carried, earning revenue.....	303,543		
Total number of passengers carried earning revenue.....	303,701		
Number of passengers carried one mile.....	10,359,119		
Average distance carried.....		34.10	
Average amount received from each passenger.....			\$0 73.90
Average receipts per mile for through passengers.....			02.05
Average receipts per mile for local passengers.....			02.16
Average receipts per passenger per mile for all passengers.....			02.16

*Freight traffic.—Entire lines.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	118,889		
Number of tons of local freight carried, earning revenue.....	851,674		
Total tons of freight carried, earning revenue.....	970,063		
Total mileage of through freight.....		35,374,633	
Total mileage of local freight.....		71,277,671	
Total freight mileage or tons carried one mile.....		106,652,304	
Average ton haul for through freight.....		298.8	
Average ton haul for local freight.....		83.7	
Average ton haul for all freight.....		109.9	
Average amount received for each ton haul.....			\$0 74.82
Average receipts ton per mile, for through freight.....			00.24
Average ton receipts per mile, for local freight.....			00.59
Average receipts ton per mile, for all freight.....			00.678

*Freight traffic.—In State of Michigan.*

Number of tons of through freight carried, earning revenue.....	124,310		
Number of tons of local freight carried, earning revenue.....	845,753		
Total tons of freight carried, earning revenue.....	970,063		
Total mileage of through freight.....		36,397,968	
Total mileage of local freight.....		69,544,002	
Total freight mileage or tons carried one mile.....		105,941,970	
Average ton haul for through freight.....		292.8	
Average ton haul for local freight.....		82.2	
Average ton haul for all freight.....		109.2	
Average amount received for each ton haul.....			\$0 72.94
Average receipts ton per mile, for through freight.....			00.26
Average receipts ton per mile, for local freight.....			00.83
Average receipts ton per mile, for all freight.....			00.669

## MICHIGAN RAILROAD RETURNS, 1896.

## FREIGHT TRAFFIC MOVEMENT.—ENTIRE LINES.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	16,636	29,711	46,347	4.78
Flour.....	7,773	28,274	36,047	3.72
Other mill products.....	8,558	9,840	18,398	1.38
Hay.....	8,287	15,154	23,441	2.42
Tobacco.....	.....	1,853	1,853	.19
Cotton.....	.....	4,153	4,153	.43
Fruit and vegetables.....	7,137	10,113	17,250	1.78
Potatoes.....	1,392	6,014	7,406	.76
<b>Products of animals:</b>				
Live stock.....	9,066	672	9,738	1.04
Dressed meats.....	13	.....	13	.00
Other packing houses products.....	.....	140	140	.01
Poultry, game and fish.....	334	726	1,060	.11
Wool.....	175	162	337	.03
Hides and leather.....	1,304	2,533	3,837	.40
<b>Products of mines:</b>				
Anthracite coal.....	22	19,204	19,226	1.98
Bituminous coal.....	.....	286,863	286,863	29.57
Coke.....	.....	1,040	1,040	.11
Ores.....	174	.....	174	.02
Stone, sand and other like articles.....	578	4,892	5,470	.56
Salt.....	1	4,092	4,093	.42
<b>Products of forest:</b>				
Lumber.....	127,926	71,775	199,701	20.58
Logs.....	74,587	2,419	77,006	7.94
Charcoal.....	11,620	182	11,752	1.21
<b>Manufactures:</b>				
Petroleum and other oils.....	5,670	5,607	11,277	1.16
Sugar.....	181	2,266	2,447	.25
Staves and heading.....	26,455	7,182	33,637	3.47
Iron, pig and bloom.....	367	2,781	3,148	.32
Iron and steel rails.....	.....	512	512	.05
Other castings and machinery.....	6,276	8,078	14,352	1.48
Bar and sheet metal.....	98	122	220	.02
Cement, brick, and lime.....	5,031	4,034	9,065	.93
Agricultural implements.....	396	962	1,358	.14
Wagons, carriages, tools, etc.....	382	907	1,289	.13
Wines, liquors and beers.....	3,263	2,748	6,011	.62
Household goods and furniture.....	3,862	1,098	4,960	.51
Ice.....	27,121	852	27,973	2.88
<b>Merchandise.....</b>	<b>13,766</b>	<b>23,034</b>	<b>36,800</b>	<b>3.79</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	19,480	27,139	46,619	4.81
<b>Total tonnage.....</b>	<b>382,931</b>	<b>537,132</b>	<b>920,063</b>	<b>100</b>

## FREIGHT TRAFFIC MOVEMENT.—IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	16,636	29,711	46,347	4.78
Flour.....	7,773	23,274	36,047	3.72
Other mill products.....	3,553	9,840	13,393	1.88
Hay.....	8,287	15,154	23,441	2.42
Tobacco.....	-----	1,853	1,853	.19
Cotton.....	-----	4,153	4,153	.43
Fruit and vegetables.....	7,137	10,113	17,250	1.78
Potatoes.....	1,392	6,014	7,406	.76
<b>Products of animals:</b>				
Live stock.....	9,066	672	9,738	1.04
Dressed meats.....	13	-----	13	.00
Other packing house products.....	-----	140	140	.01
Poultry, game and fish.....	334	726	1,060	.11
Wool.....	175	162	337	.03
Hides and leather.....	1,304	2,533	3,837	.40
<b>Products of mines:</b>				
Anthracite coal.....	22	19,204	19,226	1.96
Bituminous coal.....	-----	286,863	286,863	29.57
Coke.....	-----	1,040	1,040	.11
Ores.....	174	-----	174	.02
Stone, sand and other like articles.....	578	4,692	5,470	.56
Salt.....	1	4,092	4,093	.42
<b>Products of forest:</b>				
Lumber.....	127,926	71,775	199,701	20.58
Logs.....	74,537	2,419	77,006	7.94
Charcoal.....	11,620	132	11,752	1.21
<b>Manufactures:</b>				
Petroleum and other oils.....	5,670	5,607	11,277	1.16
Sugar.....	181	2,286	2,447	.25
Staves and heading.....	26,453	7,182	33,637	3.47
Iron, pig and bloom.....	367	2,781	3,148	.32
Iron and steel rails.....	-----	512	512	.05
Other castings and machinery.....	6,276	8,076	14,352	1.48
Bar and sheet metal.....	98	122	220	.02
Cement, brick, and lime.....	5,031	4,034	9,065	.93
Agricultural implements.....	396	962	1,358	.14
Wagons, carriages, tools, etc.....	332	907	1,239	.13
Wines, liquors and beers.....	3,263	2,748	6,011	.62
Household goods and furniture.....	3,862	1,098	4,960	.51
Ice.....	27,121	832	27,973	2.88
<b>Merchandise.....</b>	<b>13,766</b>	<b>23,034</b>	<b>36,800</b>	<b>3.79</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	19,430	27,189	46,619	4.81
<b>Total tonnage.....</b>	<b>332,931</b>	<b>587,132</b>	<b>970,063</b>	<b>100</b>

## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Co. Freight taken at depots only. Fixed rate per mile of road.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

Ann Arbor Railroad Co., 301.41 miles.

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

## KILLED.

January 26, Geo. Faust, brakeman, Marion. Fell from train; carelessness.

July 23, J. Entwistle, trespasser, Owosso. Trespasser; carelessness.

November 26, Jno. Fitzpatrick, sectionman, Mt. Pleasant. Struck by engine; carelessness.

## INJURED.

January 1, H. O. Smith, brakeman, Mt. Pleasant. Coupling cars.

January 26, John Hunt, brakeman, Pottsville. Falling from train.

February 14, W. M. Hay, brakeman, Samaria. Coupling cars.

April 12, James Wood, sectionman, Byron. Handling timber.

April 15, Geo. Stormes, sectionman, Hamburg Junction. Cutting timber.

July 7, Jno. Keating, sectionman, Hamburg Junction. Cutting steel rail.

July 9, F. Mann, brakeman, Byron. Coupling cars.

July 27, W. Brazen, sectionman, Ann Arbor. Dumping car.

August 5, Geo. Snell, brakeman, Thompsonville. Climbing between cars.

August 18, G. B. Harris, fireman, Ureia. Engine derailed.

August 23, D. Wright, sectionman, Milan. Push car run over leg.

September 30, M. Kruse, car repairer, Owosso. Moving car axles.

October 15, John Reilly, pitman, Howell Junction. Excavating.

October 19, Tony Parish, laborer, Ann Arbor. Climbing on car.

October 29, T. Blacklock, conductor, Hamburg Junction. Falling from train.

November 1, J. L. Scott, brakeman, Dundee. Coupling cars.

December 12, G. E. Isham, brakeman, Monroe Junction. Coupling cars.

December 23, Miss M. Kearney, Ann Arbor. Coasting across track, struck by switch engine.

December 23, C. Burlingame, Ann Arbor. Coasting across track, struck by switch engine.

December 28, Miss I. Duffy, Ann Arbor. Coasting across track, struck by switch engine.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Passengers.	Employees.	Others.	Passengers.	Employees.	Others.
Coupling cars.....					5	
Derailements.....					1	
Falling from trains.....		1			2	
Getting on and off trains.....					1	
Highway crossings.....						3
Miscellaneous.....					8	
Trespassers on tracks.....			1			
Struck by engine.....		1				
Total.....		2	1		17	3

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year.....	3
Number of persons injured during the year.....	20
Number of casualties purely accidental.....	14
Number resulting from lack of caution, carelessness, or misconduct.....	6



## ANN ARBOR RAILROAD COMPANY.

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## CLASSIFICATION OF EMPLOYÉS.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen .....		7	7
Brakemen .....	1		1
Conductors .....		1	1
Firemen .....		1	1
Laborers .....		6	6
Not classified above .....	1	2	3
<b>Total</b> .....	<b>2</b>	<b>17</b>	<b>19</b>

STATE OF OHIO, }  
COUNTY OF LUCAS, } ss.

W. R. Burt, president, and F. Gossman, auditor, of the Ann Arbor Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed

W. R. BURT, *President.*F. GOSSMAN, *Auditor.*

Subscribed and sworn to before me this 19th day of April, A. D. 1897,

[L. S.]

J. A. MILLER,  
*Notary Public.*

# ANNUAL REPORT

## OF THE

### ARCADIA & BETSEY RIVER RAILWAY COMPANY,

*For the year ending December 31, 1896.*

[Filed January 29, 1897.]

#### OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, HENRY STARKE, Arcadia, Mich.  
*Vice President*, HENRY MAUNTLER, Arcadia, Mich.  
*Secretary*, CHAS. J. STARKE, Arcadia, Mich.  
*Auditor*, ADOLPH HASSE, Arcadia, Mich.  
*Treasurer*, CHAS. J. STARKE, Arcadia, Mich.  
*General Manager*, HENRY STARKE, Arcadia, Mich.  
*Chief Engineer*, JOHN A. MITCHELL, Ludington, Mich.  
*Traffic Manager*, CHAS. J. STARKE, Arcadia, Mich.  
*Attorney*, A. J. DOVEL, Manistee, Mich.

#### DIRECTORS.

HENRY STARKE, Arcadia, Mich.  
 CHAS. J. STARKE, Arcadia, Mich.  
 HENRY MAUNTLER, Arcadia, Mich.  
 MARIA STARKE, Arcadia, Mich.  
 JOHN WELDT, Arcadia, Mich.

Term expires December 31, 1897.

#### STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: September 25, 1895.  
 Number of stockholders at date of last election: 7.  
 Number of stockholders in Michigan at same date: 7.  
 Amount of full paid stock held in Michigan at same date: \$140,000.  
 Date of annual meeting of stockholders: First Monday in January.  
 Fiscal year of company ends: December 31.  
 General offices of the company are located at Arcadia, Mich.

#### GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$6,022 84
Total expenses, including taxes .....	\$3,043 23	
Net income.....		\$2,979 56
Balance applicable to dividends.....		\$2,979 56
Balance for the year.....		\$2,979 56
Balance (profit and loss) last year.....		335 96
Balance forward to next year.....		\$3,315 52

#### ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$165,000 00
Par value of shares.....	\$100 00	
Number of shares issued.....	1,400	
Amount paid in on common.....	\$140,000 00	
Total amount paid in, as per books of the company.....		\$140,000 00
Paid in per mile of road owned by company, 20½ miles .....		\$6,829 24

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
Capital paid in.....				\$140,000 00

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For miscellaneous.		\$335 96

## RECAPITULATION.

Total funded debt.....	\$140,000 00
Total unfunded debt.....	335 96
Total debt liabilities.....	\$140,335 96
Amount of debt liabilities per mile of road (20½ miles).....	16 38
Total amount of stock and debt.....	140,335 96
Stock and debt per mile of road (20½ miles).....	6,845 65

## GENERAL BALANCE SHEET.—Dr.

Construction account.....	\$124,512 65
Equipment account.....	13,607 07
Other investments (specifying same):	
Car shop and round house.....	\$1,200 00
Real estate.....	3,711 08
	4,911 08
Debit balances from companies and individuals.....	\$143,030 80
	234 72
Total.....	\$143,315 52

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$140,000 00
Unfunded debt:	
Dividends unpaid.....	335 96
Profit and loss or income accounts.....	2,979 56
Total.....	\$143,315 52

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction and equipment.....	\$138,119 72
Average cost per mile of road, not including sidings, 20½ miles, 2¼ miles sidings.....	5,413 59
Proportion of cost for Michigan.....	5,413 59

*Purchased by present company.*

When purchased: September 25, 1895.	
Original cost to present company, of road and equipment.....	\$113,689 34
Amount expended since purchase, account of construction.....	24,975 72
Amount expended since purchase, account of equipment.....	204 66
	\$138,869 72
Less amount received from sale of narrow gauge engine.....	750 00
Total cost to date of report.....	\$138,119 72
Average cost per mile of road, not including sidings, 20½ miles, 2¼ miles siding.....	5,413 59
Proportion of cost for Michigan.....	5,413 59

## MICHIGAN RAILROAD RETURNS, 1896.

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Extensions and new sidings and ballasting.....	\$10,313 05
New buildings.....	335 80
New fences.....	403 70
Machinery and tools.....	4,106 00
New Cars.....	204 66
Total.....	<u>\$15,362 71</u>
Total charges to property account as above.....	15,362 71
Property sold and credited.....	750 00
Net addition to property account.....	<u><u>14,612 71</u></u>

## ANALYSIS OF EARNINGS.—IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

Main line and branches:	
Local fares.....	\$50 68
Total passenger fares.....	<u>50 68</u>
Total passenger department earnings.....	\$50 68
Per mile of road, 17¼ miles operated.....	\$2 90

## FREIGHT EARNINGS.

Main line and branches:	
Local traffic.....	\$5,782 30
Through traffic.....	189 86
Total traffic.....	<u>5,972 16</u>
Total freight department earnings.....	5,972 16
Per mile of road, 17¼ miles operated.....	341 27
Total transportation earnings, entire line.....	6,022 84
Transportation earnings per mile of road, 17¼ miles operated.....	<u>344 16</u>
Total earnings from operation of road.....	6,022 84
Total earnings per mile of road, 17¼ miles operated.....	344 16
Total income from all sources.....	<u>\$6,022 84</u>
Proportion of income for Michigan.....	<u><u>6,022 84</u></u>

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Renewals of rails }	
Renewals of ties }	\$401 65
Repairs and renewals of bridges and culverts.....	9 96
Repairs and renewals of fences, road crossings, signs and cattle guards.....	<u>6 93</u>
Total.....	<u><u>\$418 54</u></u>

## MAINTENANCE OF EQUIPMENT.

Repairs and renewals of passenger cars }	
Repairs and renewals of freight cars.....	\$563 47
Repairs and renewals of work cars.....	
Total.....	<u><u>\$563 47</u></u>

## CONDUCTING TRANSPORTATION.

Engine and roundhouse men.....	\$716 00
Fuel for locomotives.....	390 50
Oil, tallow and waste for locomotives.....	135 54
Train service.....	492 72
Telegraph expenses.....	3 13
Loss and damage.....	25 62
Advertising.....	4 63
Stationery and printing.....	14 00
Other expenses.....	<u>71 69</u>
Total.....	<u><u>\$1,853 88</u></u>

# ARCADIA & BETSEY RIVER RAILWAY COMPANY.

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## GENERAL EXPENSES.

Law expenses.....	\$179 22
Taxes.....	28 22
Total.....	<u>\$207 44</u>

## RECAPITULATION OF EXPENSES.

Maintenance of way and structures.....	\$418 57
Maintenance of equipment.....	563 44
Conducting transportation.....	1,833 83
General expenses, including taxes.....	207 44
Total operating expenses and taxes.....	<u>\$3,043 28</u>
Proportion of operating expenses and taxes for Michigan.....	<u>3,043 28</u>
Total proportion of expenses for Michigan.....	<u>\$3,043 28</u>
Percentage of expenses to earnings.....	50.53%
Net earnings per mile of road.....	<u>170 26</u>

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
 From Arcadia to C & W. M. Ry. crossing, about November 15, 1895.  
 From Arcadia to Copemish, Mich., December 12, 1896.

### MAIN LINE.

	Miles.
In Michigan, from Arcadia to Copemish.....	20.50
Total length completed, but not all ballasted.....	<u>20.50</u>

### BRANCHES.

From main line to timber lands.....	2.50
Total length of branches owned by company.....	<u>2.50</u>
Total length of branches owned by company in Michigan.....	2.50
Total length of road belonging to this company, including branches.....	<u>23.00</u>
Total length of road belonging to this company, in Michigan, including branches.....	<u>23.00</u>
Gauge of track, 4 feet 8½ inches.	

### Number of bridges and trestles in Michigan.

Wooden bridges, number of:	
Four small bridges across creeks.....	4
Total.....	<u>4</u>

### Crossings.—Railroad and Highway.

What railroads cross your road at grade in this State, and at what locality?  
 C. & W. M. R. R. at Henry, section 15, T. 24, N. 14 W.

At what crossings are interlocking and derailing switches in operation?  
 C. & W. M. railroad crossing.

What pattern or patterns have you adopted?  
 National Switch & Signal Co. half interlocking switch and signal system, as ordered by the Board of Railroad Crossing on Oct. 29, 1895.

Number of crossings of highways at grade in this State?  
 Twenty-three.

Are your frogs and guard rails blocked as required by act 174, session laws 1883?  
 Yes.

How are they treated?  
 Wooden blocks.

### Stations.

Number of stations on whole lines, including flag-stations.....	13
Same in Michigan.....	<u>13</u>

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials 20 to 30  
 Same in Michigan ..... 20 to 30

Classify your employés as per following list:

	Number.
Brakemen .....	1
Conductors .....	1
Engineers .....	1
Firemen .....	1
Laborers .....	12 to 22
Shopmen .....	1
Others .....	3

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? ..... 19  
 Give the number of miles required to complete fence both sides of your track in Michigan  
 and the counties in which needed: Manistee county ..... 22

*Road bed and track.*

Road not yet divided into sections.  
 Construction gang attend to maintenance of track.  
 Number of new ties put in track in Michigan, including extension to Copemish, 6,443.  
 Steel rails, 3 miles; about 264 tons, second-hand rail laid by A. A. Ry.

*Bridges and culverts.*

New bridges built during the year—number ..... 1

Location.	Kind.	Material.	Month built.	Feet in length.
Section 12, T. 24, N. 14 W. ....	Timber .....	Wood .....	September. ....	50

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender .....	1	\$6,775 00
Total .....	1	\$6,775 00
Number of platform cars .....	15	3,227 41
Number of conductors' way cars .....	1	204 66
Logging cars .....	34	3,400 00
Total number .....	50	\$13,807 07

What patterns of power brakes have you in use, and number of locomotives and cars with each?  
 New York Air brake on locomotive.

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?  
 No.

What pattern or patterns have you adopted for use?  
 Common.

## MILEAGE TRAFFIC, ETC.

*Freight traffic.—In State of Michigan.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue .....	238	17½	\$189 86
Number of tons of local freight carried, earning revenue .....			5,782 30

## FREIGHT TRAFFIC MOVEMENT.—IN STATE OF MICHIGAN.

*Company's material excluded.*

Freight originating on this road—Whole tons:	
Products of agriculture—Straw.....	10
Products of forest—Lumber.....	187
Logs, 5,129,006 feet.	
Cordwood, 847 cords.	
Tan-bark, 968 cords.	
Manufactures—Iron and steel rails.....	53
Wagons, carriages, tools, etc.....	1-10
Household goods and furniture.....	5

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?  
No express companies on this line.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
Twenty-one miles of telephone line belonging to Henry Starke Land and Lumber Co.

STATE OF MICHIGAN, } ss.  
COUNTY OF MANISTEE, }

Chas. J. Starke, secretary and treasurer, and Henry Mauntler, vice president, of the Arcadia & Betsey River Railway Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

CHARLES J. STARKE.

HENRY MAUNTLE.

Subscribed and sworn to before me this 27th day of January, A. D. 1897.

[L. S.]

ADOLPH HASSE,

Notary Public for Manistee County.

# ANNUAL REPORT

## OF THE

### AU SABLE & NORTHWESTERN RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed May 6, 1897.]

#### OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President, H. M. LOUD, Au Sable.*  
*Vice President, GEO. A. LOUD, Au Sable.*  
*Secretary, H. N. LOUD, Au Sable.*  
*Auditor, W. F. LOUD, Au Sable.*  
*Treasurer, W. F. LOUD, Au Sable.*  
*General Manager, GEO. A. LOUD, Au Sable.*  
*General Superintendent, H. PARK, McKinley.*  
*Superintendent of Telegraph, THOMAS CLIFF, Au Sable.*  
*General Passenger Agent, E. F. LOUD, Au Sable.*  
*General Freight Agent, GEO. H. KEATING, Bay City.*  
*Attorney, J. B. TUTTLE, Detroit.*

#### DIRECTORS.

H. M. LOUD, Au Sable.  
 GEO. A. LOUD, Au Sable.  
 H. N. LOUD, Au Sable.  
 W. F. LOUD, Au Sable.  
 Edw. F. LOUD, Au Sable.

#### STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: July 22, 1891.  
 Number of stockholders at date of last election: 8.  
 Number of stockholders in Michigan at same date: 8.  
 Date of annual meeting of stockholders: July 22.  
 Fiscal year of company ends December 31.  
 General offices of the company are located at Au Sable, Mich.

#### GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$59,385 09
Total expenses, including taxes.....	\$70,834 48	
Net deficit.....	\$11,449 39	
Balance (profit and loss last year).....		\$277,811 68
Balance forward to next year.....		\$266,362 29

#### ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$500,000 00
Par value of shares.....	\$100 00	
Number of shares issued.....	None.	
Amount paid in on common.....		41,500 00
Amount paid in on preferred.....		41,500 00
Total amount paid in as per books of the company.....		41,500 00
Paid in per mile of road owned by company, 108 miles.....		384 28



## ANALYSIS OF DEBT ACCOUNTS.

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For current balances.....	To be paid.....	\$145,294 23

## RECAPITULATION.

Total unfunded debt.....	\$145,294 23
Total debt liabilities.....	145,294 23
Amount of debt liabilities per mile of road, 108 miles.....	1,345 81
Total amount of stock and debt.....	186,794 23
Stock and debt per mile of road, 108 miles.....	1,729 58

## GENERAL BALANCE SHEET.—Dr.

Construction account.....	}	.....	\$449,104 28
Equipment account.....			
Other investments (specifying same).....			
Other assets:			
Materials and supplies.....			192 00
Debit balances from companies and individuals.....			3,857 15
Total.....			\$453,153 42

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$41,500 00
Unfunded debt.....	145,291 14
Profit and loss or income accounts.....	286,362 29
Total.....	\$453,153 43

## COST OF ROAD AND EQUIPMENT.

## PURCHASED BY PRESENT COMPANY.

When purchased: July 17, 1891.	
Original cost to present company, of road and equipment.....	\$173,000 00
Amount expended since purchase, account of construction.....	47,890 37
Amount expended since purchase, account of equipment.....	22,515 71
Total cost to date of report.....	\$243,796 08
Average cost per mile of road, not including sidings, 108 miles.....	2,257 37

## ANALYSIS OF EARNINGS.—ENTIRE LINES.

## PASSENGER EARNINGS.

Main line and branches:	
Local fares.....	\$5,395 35
Total passenger fares.....	\$5,395 35
Mails.....	1,742 78
Total passenger department earnings.....	\$7,138 11
Per train mile.....	\$0 26
Per mile of road.....	66 09

## FREIGHT EARNINGS.

Main line and branches:	
Total traffic.....	\$52,246 98
Total freight department earnings.....	52,246 98
Per train mile.....	\$0 48
Per mile of road.....	483 77
Total transportation earnings entire line.....	\$59,385 09

Total earnings from operation of road.....	\$59,385 09
Total earnings per mile of road.....	\$549 86
Total earnings per train mile.....	43
Proportion of taxable earnings for Michigan.....	59,385 09
Total income from all sources.....	59,385 09
Proportion of income for Michigan.....	59,385 09

## MICHIGAN RAILROAD RETURNS, 1896.

## ANALYSIS OF EXPENSES.

Maintenance of way and structures.....	\$10,380 26
Maintenance of equipment.....	16,068 13
Conducting transportation.....	40,606 66
General expenses.....	3,759 46

## RECAPITULATION OF EXPENSES.

Maintenance of way and structures .....	\$10,380 26
Maintenance of equipment .....	16,068 13
Conducting transportation .....	40,606 66
General expenses, including taxes .....	3,759 46
Total operating expenses and taxes.....	\$70,834 48
Operating expenses and taxes per mile of road, 108 miles.....	655 88
Operating expenses and taxes per train mile run, for trains earning revenue, 137,160 miles.....	51
Proportion of operating expenses and taxes for Michigan: All.....	
Total proportion of expenses for Michigan .....	\$70,834 48

## DESCRIPTION OF ROAD.

MAIN LINE.		Miles.	Miles.
In Michigan, from Au Sable to McKinley.....		40	
In Michigan, from Au Sable to Lewiston.....		25	
Total length completed.....			65

## BRANCHES.

From McKinley to Woodrow .....	43	
Total length of branches owned by company.....		43
Total length of branches owned by company in Michigan .....		43
Total length of road belonging to this company.....		108
Gauge of track, 3 feet.		

## Number of bridges and trestles in Michigan.

	Number.	Aggregate length, feet.
Wooden bridges .....	2	800
Wooden trestles .....	8	3,800
Total.....	10	4,800

## Crossings.—railroad and highway.

What railroads cross your road at grade in this State, and at what locality?  
 Detroit & Mackinac R. R. at Au Sable.

At what crossings are interlocking and derailing switches in operation?  
 Detroit & Mackinac R. R.

What pattern or patterns have you adopted?  
 Union Switch & Signal Co.

Number of crossings of highways at grade in this State.  
 Thirty.

Are your frogs and guard rails blocked as required by act 174. session laws of 1883?  
 No.

How are they treated?  
 Wood.

## Stations.

Number of stations on whole lines .....	22
Same in Michigan .....	22

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials .....	153
Classify your employees per following list.	Number.
Baggagemen .....	1
Brakemen .....	11
Conductors .....	11
Engineers .....	15
Firemen .....	15
Laborers .....	85
Shopmen .....	7
Yardmen .....	8

REPAIRS AND RENEWALS.

*Road bed and track.*

Number of track sections in Michigan .....	10
Average length of sections, miles .....	6
Average number of men in each section gang .....	4

ROLLING STOCK.

	Number.
Number of locomotives of 20 to 30 tons weight, exclusive of tender .....	16
Number of locomotives of 10 to 20 tons weight, exclusive of tender .....	5
Total .....	21
Number of passenger cars—8-wheel, including official cars .....	2
Number of express and baggage cars .....	2
Number of box freight cars .....	8
Number of stock cars .....	3
Number of platform cars .....	12
Other cars as follows:	
Russell's, 240; coal, 22; long timber cars, 50; snow plow, 1 .....	313
Total .....	340
Number of locomotives equipped with power brakes .....	21
Number of passenger-train cars equipped with power brakes .....	4

What pattern of power brakes have you in use, and number of locomotives and cars with each?  
Air, steam and vacuum.

How are your passenger cars heated?  
Stoves.

MILEAGE TRAFFIC, ETC.

*Train mileage.*

	In Michigan.
Miles run by passenger trains during the year .....	27,800
Miles run by freight trains during the year .....	109,390
Total mileage of trains earning revenue .....	137,190

*Passenger traffic.—Entire lines.*

	Number.
Number of through passengers carried, earning revenue .....	8,976

*Passenger traffic.—In State of Michigan.*

Number of through passengers carried, earning revenue .....	8,976
-------------------------------------------------------------	-------

*Freight traffic.—Entire lines.*

	Tons.
Number of tons of through freight carried earning revenue .....	140,000

*Freight traffic.—In State of Michigan.*

Number of tons of through freight carried, earning revenue .....	140,000
------------------------------------------------------------------	---------

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
66 miles; Au Sable & Northwestern R. R.

STATE OF MICHIGAN, } ss.  
COUNTY OF IOSCO, }

Geo. A. Loud, V. P. and H. N. Loud, Sec'y of the Au Sable & Northwestern Railroad Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed

GEORGE A. LOUD, V. P.  
HENRY N. LOUD, Sec'y.

Subscribed and sworn to before me this 4th day of May, A. D. 1897.

FORREST C. EBLING,  
Notary Public in and for Iosco Co., Mich.

**ANNUAL REPORT**  
OF THE  
**BAY CITY BELT LINE RAILROAD COMPANY.**

*For the year ending December 31, 1896.*

[Filed April 30, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President*, ALBERT MILLER, Bay City, Mich.  
*Secretary*, CHESTER L. COLLINS, Bay City, Mich.  
*Treasurer*, JOSEPH TURNER, Bay City, Mich.

**DIRECTORS.**

ALBERT MILLER, Bay City, Mich.  
JOSEPH TURNER, Bay City, Mich.  
C. L. COLLINS, Bay City, Mich.  
W. H. TOUSEY, (deceased), Bay City, Mich.  
GEORGE TURNER, Bay City, Mich.  
G. HENRY SHEARER, Bay City, Mich.  
E. T. CARRINGTON, Bay City, Mich.  
Terms expire first Wednesday in June, 1897.

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: June 30, 1889.  
Number of stockholders at date of last election: 9.  
Number of stockholders in Michigan at same date: 8.  
Amount of full paid stock held in Michigan at same date: \$51,750.00.  
Date of annual meeting of stockholders: First Monday in June.  
Fiscal year of company ends, first Monday in June.  
General offices of the company are located at Bay City, Mich.

**REMARKS.**

Of the total mileage owned, 6 21 miles are leased to the Flint & Pere Marquette Railroad Company; and 1.88 miles are leased to the Michigan Central Railroad Company; each lessee company operates and maintains its respective mileage.

**ANALYSIS OF CAPITAL STOCK.**

Amount authorized by charter or articles of association .....		\$100,000 00
Par value of shares .....	\$100 00	
Average price received per share .....	100 00	
Number of shares issued .....	1,000	
Total amount paid in as per books of the company .....		\$100,000 00
Paid in per mile of road owned by company, 8 00 miles .....		12,380 94

## MICHIGAN RAILROAD RETURNS, 1896.

## ANALYSIS OF DEBT ACCOUNTS.

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated.	Amount.
For construction .....		\$13,059 37
For real estate .....		5,280 91
Total unfunded debt .....		\$18,340 28

## RECAPITULATION.

Total unfunded debt .....	\$18,340 28
Total debt liabilities .....	118,340 28
Amount of debt liabilities per mile of road, 8.09 miles .....	14,627 97
Total amount of stock and debt .....	118,340 28
Stock and debt per mile of road .....	14,627 98

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction .....	\$113,059 37
Average cost of construction per mile of road (not including sidings), 8.09 miles .....	113,975 20
Proportion of cost of construction for Michigan .....	113,059 37

## DESCRIPTION OF ROAD.

MAIN LINE.	Miles.	Miles.
Length completed in Michigan:		
Leased to F. & P. M. R. R. Co. ....	6.21	
Leased to M. C. R. R. Co. ....	1.88	
Total length completed .....		8.09
Aggregate length of sidings, spurs and other tracks not above enumerated:		
F. & P. M. ....		4.71
M. C. ....		4.71
Aggregate length of tracks belonging to this company, computed as single track .....		12.80
Gauge of track, 4 feet 3¼ inches.		

STATE OF MICHIGAN, } ss.  
COUNTY OF BAY, }

Albert Miller, president, and Chester L. Collins, secretary of the Bay City Belt Line Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed

ALBERT MILLER, *President.*

CHESTER L. COLLINS, *Secretary.*

Subscribed and sworn to before me this 28th day of April, A. D. 1897.

HORACE TUPPER, JR.  
*Notary Public, Bay County, Mich.*

# ANNUAL REPORT

## OF THE

### BOYNE CITY & SOUTHEASTERN RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed April 12, 1897]

#### OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, WM. H. WHITE, Boyne City, Mich.  
*Vice President*, THOS. WHITE, Boyne City, Mich.  
*Secretary*, A. D. WHITE, Boyne City, Mich.  
*Auditor*, L. D. FAIRCHILD, Boyne City, Mich.  
*Treasurer*, JAMES A. WHITE, Boyne City, Mich.  
*General Manager*, WM. H. WHITE, Boyne City, Mich.  
*General Superintendent*, R. V. WHITE, Boyne City, Mich.  
*Assistant General Superintendent*, THOS. WHITE, Boyne City, Mich.  
*Chief Engineer*, A. J. TEED, Cadillac, Mich.  
*Cashier*, L. D. FAIRCHILD, Boyne City, Mich.  
*General Passenger Agent*, A. D. WHITE, Boyne City, Mich.  
*General Freight Agent*, GEORGE WHITE, Boyne City, Mich.  
*Attorney*, J. M. HARRIS, Boyne City, Mich.

#### DIRECTORS.

WM. H. WHITE, Boyne City, Mich.  
 THOMAS WHITE, Boyne City, Mich.  
 JAMES A. WHITE, Boyne City, Mich.  
 GEORGE WHITE, Boyne City, Mich.  
 R. V. WHITE, Boyne City, Mich.  
 LYDE WHITE, Grand Rapids, Mich.  
 A. D. WHITE, Boyne City, Mich.

#### STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: May 3, 1893.  
 Number of stockholders at date of last election: 7.  
 Number of stockholders in Michigan at same date: 7.  
 Date of annual meeting of stockholders: First Monday in January each year.  
 Fiscal year of company ends: December 31, 1896.  
 General offices of the company are located at Boyne City, Mich.

#### GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$19,205 35
Total expenses, including taxes.....	\$11,558 59	
Net income.....		\$7,646 76
Balance applicable to dividends.....		\$7,646 76
Balance for the year.....		\$7,646 76
Balance (profit and loss) last year.....		10,180 84
Balance forward to next year.....		\$17,797 60

## MICHIGAN RAILROAD RETURNS, 1896.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$256,000 00
Par value of shares.....	\$100 00	
Number of shares issued.....	500	
Amount paid in on common.....	\$50,000 00	
Total amount paid in, as per books of the company.....		50,000 00
Paid in per mile of road owned by company, 16 miles.....		<u>3,125 00</u>

## ANALYSIS OF DEBT ACCOUNTS.

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For construction.....	Paid from earnings.....	\$43,012 31
For equipment.....		2,436 50
For renewals.....		1,081 91
For miscellaneous.....		3,250 96
Total unfunded debt.....		<u>\$49,781 68</u>

## RECAPITULATION.

Total unfunded debt.....	\$49,781 68
Total debt liabilities.....	49,781 68
Amount of debt liabilities per mile of road, 16 miles.....	3,111 35
Total amount of stock and debt.....	99,781 68
Stock and debt per mile of road, 16 miles.....	<u>6,236 35</u>

## GENERAL BALANCE SHEET.—Dr.

Construction account.....	\$69,982 62	
Equipment account.....	15,300 00	
Other investments (specifying same):		
Dock.....	450 00	
Roundhouse.....	531 91	
Oil, house and coal bin.....	150 00	
		\$86,414 53
Cash items:		
Cash.....	\$254 07	
Bills receivable.....	385 68	
		639 75
Other assets:		
Materials and supplies.....	\$525 00	
Debit balances from companies and individuals.....	30,000 00	
		30,525 00
Total.....		<u>\$117,579 28</u>

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$50,000 00	\$50,000 00
Unfunded debt:		
Notes payable.....		8,110 90
Vouchers and accounts.....		3,250 96
Other liabilities (list as follows):		
Open accounts.....		38,419 82
Profit and loss or income accounts.....		17,797 60
Total.....		<u>\$117,579 28</u>

## COST OF ROAD AND EQUIPMENT.

Total cost for construction and equipment of road and branches built by company.

Total expended for construction and equipment.....	\$85,282 62
Average cost per mile of road (not including sidings) 16 miles.....	5,330 16
Proportion of cost for Michigan.....	<u>85,282 62</u>



## ANALYSIS OF EARNINGS.—IN STATE OF MICHIGAN.

PASSENGER EARNINGS.		
Main line and branches:		
Local fares .....	\$522 15	
Total passenger fares .....	\$522 15	
Mails .....	307 24	
Total passenger department earnings .....		\$829 39
Per train mile .....	\$0 11	
Per mile of road .....	51 84	
FREIGHT EARNINGS.		
Main line and branches:		
Local traffic .....	\$16,070 11	
Through traffic .....	1,947 90	
Total traffic .....	\$18,018 01	
Other sources—freight department .....	357 95	
Total freight department earnings .....		18,375 96
Per train mile .....	\$0 97	
Per mile of road .....	1,148 50	
Total transportation earnings, entire line .....		\$19,205 35
Transportation earnings per mile of road .....		1,200 33
Transportation earnings per train mile .....		74
Total earnings from operation of road .....		19,205 35
Total earnings per mile of road .....		1,200 33
Total earnings per train mile .....		74
Total income from all sources .....		19,205 35
Proportion of income for Michigan .....		19,205 35

## ANALYSIS OF EXPENSES.

MAINTENANCE OF WAY AND STRUCTURES.	
Repairs of roadway .....	\$1,354 58
Renewals of ties .....	1 15
Repairs and renewals of bridges and culverts .....	14 93
Repairs and renewals of fences, road crossings, signs and cattle guards .....	163 62
Repairs and renewals of buildings and fixtures .....	89 31
Total .....	\$1,573 58

## MAINTENANCE OF EQUIPMENT.

Repairs and renewals of locomotives .....	\$1,522 04
Repairs and renewals of passenger cars .....	48 66
Repairs and renewals of freight cars .....	1,154 11
Total .....	\$2,724 81

## CONDUCTING TRANSPORTATION.

Engine and roundhouse men .....	\$2,156 66
Fuel for locomotives .....	1,586 45
Oil, tallow and waste for locomotives .....	283 72
Other supplies for locomotives .....	92 81
Train service .....	790 85
Train supplies and expenses .....	19 37
Telegraph expenses .....	22 95
Station supplies .....	300 55
Hire of equipment .....	88 00
Loss and damage .....	1,040 33
Advertising .....	8 40
Rent of buildings and other property .....	25 00
Stationery and printing .....	53 62
Other expenses .....	385 74
Total .....	\$6,859 45

## MICHIGAN RAILROAD RETURNS, 1896.

## GENERAL EXPENSES.

Salaries of general officers.....	\$200 00
Insurance.....	75 00
Law expenses.....	125 77
Total.....	<u>\$400 77</u>

## RECAPITULATION OF EXPENSES.

Maintenance of way and structures.....	\$1,573 56
Maintenance of equipment.....	2,724 81
Conducting transportation.....	6,859 45
General expenses, including taxes.....	400 77
Total operating expenses and taxes.....	<u>\$11,558 59</u>
Operating expenses and taxes per mile of road.....	722 41
Operating expenses and taxes per train mile run, for trains earning revenue.....	44
Proportion of operating expenses and taxes for Michigan, main line.....	<u>11,558 59</u>
Total proportion of expenses for Michigan.....	<u>\$11,558 59</u>
Percentage of expenses to earnings.....	60
Net earnings per mile of road.....	<u>477 92</u>

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Boyne City, Mich., to Boyne Falls, Mich., August 28, 1893.

From White's Junction to Camp No. 2, November 12, 1894.

From Camp No. 2 to New Camps, December 2, 1896.

Extension of main line 2 miles December 20, 1896.

MAIN LINE.	Miles.	Miles.
In Michigan, from Boyne City to White's Camp.....	13.12	
Total length completed.....		<u>13.12</u>

BRANCHES.		
From White's Junction to Boyne Falls.....	.82	
From Camp to Banking Ground.....	1.36	
From main line to saw mills and dock.....	.70	
Total length of branches owned by company.....		<u>2.88</u>
Total length of branches owned by company in Michigan.....	2.88	
Total length of road belonging to this company.....		<u>16</u>
Total length of road belonging to this company in Michigan.....		<u>16</u>
Aggregate length of tracks in Michigan belonging to this company, computed as single track.....		<u>16</u>

Gauge of track 4 feet 8½ inches.

If north of parallel 44 of latitude:

Yes.

Give date road commenced to be built:

April 28, 1893.

Give date road completed:

August 28, 1893, between Boyne City and Boyne Falls.

Give date road commenced to be operated:

August 28, 1893, between Boyne City and Boyne Falls.

Where built from and to:

Boyne City to White's Camp; White's Junction to Boyne Falls.

Give exact number of miles:

Sixteen.

## Number of bridges and trestles in Michigan.

	Number.	Aggregate length, feet.
Wooden bridges.....	2	96
Total.....	<u>2</u>	<u>96</u>

*Crossings.—Railroad and highway.*

Number of crossings of highways at grade in this State..... 8  
 Are your frogs and guard rails blocked as required by act 174, session laws of 1883?  
 Yes.

How are they treated?  
 Blocked with wooden blocks.

*Stations.*

Number of stations on whole lines..... 6  
 Same in Michigan..... 6

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials..... 24  
 Same in Michigan..... 24

Classify your employes as per following list:

Number.

Baggagemen.....	1
Brakemen.....	2
Conductors.....	2
Engineers.....	2
Firemen.....	2
Laborers.....	10
Shopmen.....	2
Yardmen.....	1
Others.....	2

*Road bed and track.*

Number of track sections in Michigan..... 2  
 Average length of sections (miles)..... 8  
 Average number of men in each section gang..... 4  
 Total miles of track laid with new rails..... 2

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of 20 to 30 tons weight, exclusive of tender.....	1	\$5,700 00
Number of locomotives of 10 to 20 tons weight, exclusive of tender.....	1	2,000 00
Total.....	2	\$7,700 00
Number of passenger cars—8-wheel, including official cars.....	1	\$800 00
Number of box freight cars, leased.....	1	
Other cars as follows:		
Logging.....	33	6,600 00
Total.....	35	\$7,400 00

Number of locomotives equipped with power brakes:  
 One American.

Number of passenger-train cars equipped with power brakes:  
 One Westinghouse air brake.

What patterns of power brakes have you in use, and number of locomotives and cars with each?

One American steam brake.

How are your passenger cars heated?

Coal stoves.

## MILEAGE, TRAFFIC, ETC.

*Train mileage.*

	Entire lines.
Miles run by passenger trains during the year.....	7,060
Miles run by freight trains during the year.....	18,780
Total mileage of trains earning revenue.....	25,830

*Passenger traffic.—In State of Michigan.*

	Numbers.	Miles.	Rate.
Number of local passengers carried, earning revenue.....	1,740		
Total number of passengers carried, earning revenue.....	1,740		
Number of passengers carried one mile.....	12,180		
Average distance carried.....		7	
Average amount received from each passenger.....			\$0 30
Average receipts per mile for local passengers.....			04.28
Average receipts per passenger per mile for all passengers.....			04.28
Estimated cost of carrying each passenger one mile.....			02.5

*Freight traffic.—In State of Michigan.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	526	7	
Number of tons of local freight carried, earning revenue.....	36,499	15	
Total tons of freight carried, earning revenue.....	37,025		
Total mileage of through freight.....		3,632	
Total mileage of local freight.....		547,435	
Total freight mileage or tons carried one mile.....		551,167	
Average ton haul for through freight.....		7	
Average ton haul for local freight.....		15	
Average ton haul for all freight.....		14.9	
Average amount received for each ton haul.....			\$0 49
Average receipts ton per mile, for through freight.....			53
Average receipts ton per mile, for local freight.....			3
Average receipts ton per mile, for all freight.....			3
Estimated cost of carrying one ton one mile.....			1.2

## FREIGHT TRAFFIC MOVEMENT.—IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	50	39	89	
Flour.....	43	48	91	
Other mill products.....	106	1	107	
Hay.....	83	83	166	
Tobacco.....		3	3	
Cotton.....	1	9	10	
Fruit and vegetables.....	22	12	34	
Potatoes.....	23	1	24	
<b>Products of animals:</b>				
Live stock.....	17	17	34	
Dressed meats.....	9	15	24	
Other packing house products.....		34	34	
Poultry, game and fish.....		1	1	
Hides and leather.....	5	1	6	
<b>Products of mines:</b>				
Bituminous coal.....		4	4	
Salt.....		4	4	
<b>Products of forest:</b>				
Lumber.....	295		295	
Logs.....	35,714		35,714	
Shingles.....	80		80	
<b>Manufactures:</b>				
Petroleum and other oils.....		38	38	
Sugar.....		35	35	
Iron, pig and bloom.....	1	32	33	
Other castings and machinery.....		29	29	
Cement, brick and lime.....		11	11	
Agricultural implements.....		10	10	
Wagons, carriages, tools, etc.....		3	3	
Wines, liquors and beers.....		13	13	
Household goods and furniture.....	17	16	33	
<b>Merchandise.....</b>	10	30	40	
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	23	37	60	
<b>Total tonnage.....</b>	<b>36,499</b>	<b>526</b>	<b>37,025</b>	

STATE OF MICHIGAN, }  
COUNTY OF CHARLEVOIX, } ss.

W. H. White, president, and L. D. Fairchild, auditor, of the Boyne City & Southeastern Railroad Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

WM. H. WHITE, *President.*

L. D. FAIRCHILD, *Auditor.*

Subscribed and sworn to before me this 5th day of April, A. D. 1897.

[L. S.]

JOHN F. FAIRCHILD,  
*Notary Public.*

**ANNUAL REPORT**  
**OF THE**  
**BUCHANAN & ST. JOSEPH RIVER RAILROAD COMPANY,**

*For the year ending December 31, 1896.*

[Filed July 27, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President, FRED E. LEE, Dowagiac, Mich.*  
*Vice President, JOHN G. HOLMES, Dowagiac, Mich.*  
*Secretary, J. O. BECRAFT, Dowagiac, Mich.*  
*Treasurer, J. O. BECRAFT, Dowagiac, Mich.*  
*Chief Engineer, C. W. HOTCHKISS, Niles, Mich.*

**DIRECTORS.**

FRED E. LEE, Dowagiac, Mich.  
 J. O. BECRAFT, Dowagiac, Mich.  
 H. H. PORTER, Dowagiac, Mich.  
 C. W. GROVES, Buchanan, Mich.  
 J. G. HOLMES, Buchanan, Mich.  
 FRANK ENGLISH, Buchanan, Mich.  
 JNO. M. HUBBELL, Buchanan, Mich.

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: October 12, 1894.  
 Number of stockholders at date of last election: 7.  
 Number of stockholders in Michigan at same date: 7.  
 Amount of full paid stock held in Michigan at same date: \$5,000.  
 Date of annual meeting of stockholders: October 12.  
 Fiscal year of company ends October 12.  
 General offices of the company are located at Dowagiac, Mich.

**REMARKS.**

The company has built 1 $\frac{3}{4}$  miles of line, but is not in operation yet.

**ANALYSIS OF CAPITAL STOCK.**

Amount authorized by charter or articles of association.....		\$20,000 00
Par value of shares .....	\$100 00	
Number of shares issued.....	200	
Amount paid in on common.....	5,000 00	
Total amount paid in as per books of the company.....		<u>5,000 00</u>

DESCRIPTION OF ROAD.

MAIN LINE.

Total length of road belonging to this company in Michigan .....	Miles. 1.75
------------------------------------------------------------------	----------------

REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you?  
1½ miles.

STATE OF MICHIGAN, } ss.  
COUNTY OF CASS, }

Fred E. Lee, president, and J. O. Becraft, secretary, of the Buchanan & St. Joseph River Railroad Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. s. OF E. R.]

Signed,

FRED E. LEE, *President.*

J. O. BECRAFT, *Secretary.*

Subscribed and sworn to before me this 26th day of July, A. D. 1897.

ABNER M. MOON,  
*Notary Public, Cass county, Mich.*

ANNUAL REPORT  
OF THE  
CENTRAL MICHIGAN RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed March 31, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, J. W. BOYNTON, Grand Rapids.  
*Vice President*, WM. E. GROVE, Grand Rapids.  
*Secretary*, M. C. DORITY, Grand Rapids.  
*Auditor*, DAVID L. STIVEN, Grand Rapids.  
*Treasurer*, M. C. DORITY, Grand Rapids.  
*General Manager*, J. W. BOYNTON, Grand Rapids.  
*Chief Engineer*, C. M. RICH, Grand Rapids.

DIRECTORS.

J. W. BOYNTON, Grand Rapids, Mich.  
W. E. GROVE, Grand Rapids, Mich.  
M. C. DORITY, Grand Rapids, Mich.  
PARKER MERRILL, St. Louis, Mich.  
DAVID L. STIVEN, Grand Rapids, Mich.  
FREMONT E. SKEELES, Grand Rapids, Mich.  
SILAS W. FINCH, Grand Rapids, Mich.  
H. C. PERKHAM, Freeport, Mich.  
E. W. ELLITHORP, Chicago, Ill.

Terms expire June 1, 1896, or when successors are elected.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: September 7, 1888.  
Number of stockholders at date of last election: 18.  
Number of stockholders in Michigan at same date: 18.  
Amount of full paid stock held in Michigan at same date: 130 shares.  
Date of annual meeting of stockholders: June 1.  
Fiscal year of company ends December 31.  
General offices of the company are located at Grand Rapids, Michigan.

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$3,000,000 00
Par value of shares .....	\$100	
Amount paid in on common.....	638,000	
 Total amount paid in, as per books of the company.....		 <u>638,000 00</u>



## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
July 2, 1888, issued \$7,000,000.00 1st mortgage bonds.....	5%	1938.....	New York.....	\$50,000 00

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For miscellaneous.....	Accounts.....	\$16,500 00

## RECAPITULATION.

Total funded debt .....	\$50,000 00
Total unfunded debt.....	16,500 00
Total debt liabilities.....	\$66,500 00
Amount of debt liabilities per mile of road, 156 miles .....	428 84
Total amount of stock and debt .....	704,500 00
Stock and debt per mile of road, 156 miles .....	4,591 92

## GENERAL BALANCE SHEET.—Dr.

Construction account .....	\$301,000 00
Other investments:	
146 miles right of way.....	292,000 00
Terminal grounds and railroad crossings.....	111,500 00
Total.....	\$704,500 00

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$638,000 00
Funded debt.....	50,000 00
Bills payable .....	7,500 00
Balance on land contracts .....	9,000 00
Total.....	\$704,500 00

## DESCRIPTION OF ROAD.

## Crossings.—Railroad and highway.

What railroads cross your road at grade in this State and at what locality?

Michigan Central R. R. at Battle Creek.  
 Michigan Central Air Line R. R. at or near Burlington.  
 Chicago & Grand Trunk R. R. at Battle Creek.  
 Cincinnati, Jackson & Mackinaw R. R. at Battle Creek.  
 Lake Shore & Michigan Southern R. R. at Coldwater.  
 Lake Shore & Michigan Southern R. R. at Montgomery.

STATE OF MICHIGAN, } ss.  
 COUNTY OF KENT, }

J. W. Boynton, president, and M. C. Dority, secretary, of the Central Michigan Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. of M. R.]

Signed,

J. W. BOYNTON, President.

M. C. DORITY, Secretary.

Subscribed and sworn to before me this 29th day of March, A. D. 1897.

CREYTON J. POST,  
 Notary Public in and for Kent Co., Mich.

# ANNUAL REPORT

## OF THE

### CHICAGO, DETROIT & CANADA GRAND TRUNK JUNCTION RAILWAY COMPANY,

*For the year ending December 31, 1896.*

[Filed April 3, 1897.]

#### OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, CHAS. M. HAYS, Montreal, Que.  
*Vice President*, JOHN BELL, Belleville, Ont.  
*Secretary*, CHAS. PERCY, Montreal, Que.  
*Accountant*, J. H. MUIR, Detroit, Mich.  
*General Manager*, CHAS. M. HAYS, Montreal, Que..  
*Superintendent*, A. B. ATWATER, Detroit, Mich.  
*Engineer*, GEO. MASSON, Detroit, Mich.  
*General Traffic Manager*, GEO. B. REEVE, Montreal, Que.  
*General Passenger and Ticket Agent*, W. E. DAVIS, Montreal, Que.  
*Assistant Passenger and Ticket Agent*, E. H. HUGHES, Chicago, Ill.  
*General Freight Agent*, J. W. LOUD, Montreal, Que.  
*First Assistant Freight Agent*, DAVID BROWN, Chicago, Ill.  
*Attorney*, E. W. MEDDAUGH, Detroit, Mich.

#### DIRECTORS.

CHAS. M. HAYS, Montreal, Que.  
 JOHN BELL, Belleville, Ont.  
 E. W. MEDDAUGH, Detroit, Mich.  
 W. J. SPICER, Detroit, Mich.  
 CHAS. PERCY, Montreal, Que.  
 Terms expire September, 1897.

#### STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: March 18, 1858.  
 Number of stockholders at date of last election: 8.  
 Number of stockholders in Michigan at same date: 2.  
 Amount of full paid stock held in Michigan at same date: \$200.  
 Date of annual meeting of stockholders: Last Wednesday in September.  
 Fiscal year of company ends December 31.  
 General offices of the company are located at Detroit, Mich.

#### GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$233,513 91
Total expenses including taxes.....	\$288,821 90	
Net deficit.....	\$55,307 99	
Interest on funded debt.....	\$65,700 00	
Interest on stock.....	43,800 00	
	109,500 00	
Balance for the year deficit.....	\$164,807 99	
Items not included in above as follows:		
Rents .....		\$2,840 84
Contribution from Grand Trunk R'y towards interest liabilities, deficit .....		\$161,967 15

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$1,095,000 00
Par value of shares.....		\$100 00
Number of shares issued.....	10,950	
Amount paid in on common.....		978,984 67
Total amount paid in as per books of the company.....		978,984 67
Paid in per mile of road owned by company, 59.37 miles.....		16,489 55

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage bonds, June, 1884.....	6%	June, 1884.....	London, Eng.....	\$1,085,000 00
Bond exchangeable for stock within ten years from 26 June, 1883.....	5%	.....	No interest paid.	691,141 46
Total funded debt.....				\$1,786,141 46

## RECAPITULATION.

Total funded debt.....	\$1,786,141 46
Total debt liabilities.....	\$1,786,141 46
Amount of debt liabilities per mile of road, 59.37 miles.....	30,064 92
Total amount of stock and debt.....	2,765,126 13
Stock and debt per mile of road, 59.37 miles.....	46,574 47

## GENERAL BALANCE SHEET.—Dr.

Construction account.....	\$2,765,126 13
Total.....	\$2,765,126 13

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$978,984 67
Funded debt.....	1,786,141 46
Total.....	\$2,765,126 13

Operated by the Grand Trunk Railway Co., hence there are no current balances.

## COST OF ROAD AND EQUIPMENT.

Total cost for construction and equipment of road and branches built by company.

Total expended for construction and equipment.....	\$2,765,126 13
Average cost per mile of road (not including sidings), 59.37 miles.....	46,574 46
Proportion of cost for Michigan.....	46,574 46

Equipment furnished by the lessees.

## ANALYSIS OF EARNINGS.—IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

Main line and branches:	
Local fares.....	\$66,089 51
Through fares.....	56,629 87
Total passenger fares.....	\$122,699 38
Express and baggage.....	10,834 73
Mails.....	9,749 60
Total passenger department earnings.....	\$143,283 71
Per train mile.....	\$0 72
Per mile of road.....	2,413 40

## MICHIGAN RAILROAD RETURNS, 1896.

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic	\$62,230 21	
Through traffic	27,999 99	
Total traffic	\$90,230 20	
Total freight department earnings		\$90,230 20
Per train mile	\$0 98	
Per mile of road	1,519 76	
Total transportation earnings, entire line		\$233,513 91
Transportation earnings per mile of road	3,933 20	
Transportation earnings per train mile	80	
Total		\$233,513 91
Total earnings from operation of road		\$233,513 91
Total earnings per mile of road	3,933 20	
Total earnings per train mile	80	
Total taxable earnings per mile of road in Michigan		233,513 91
Income other than from earning—rents		2,840 84
Total income from all sources		\$236,354 75

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway	\$21,333 66
Renewals of rails	1,963 59
Renewals of ties	7,479 31
Repairs and renewals of bridges and culverts	1,819 06
Repairs and renewals of fences, road crossings, signs and cattle guards	1,643 51
Repairs and renewals of buildings and fixtures	2,502 97
Total	\$36,747 10

## MAINTENANCE OF EQUIPMENT.

Superintendence	\$1,169 80
Repairs and renewals of locomotives	23,292 07
Repairs and renewals of passenger cars	20,225 22
Repairs and renewals of freight cars	17,453 17
Repairs and renewals of shop, machinery and tools	3,887 79
Stationery and printing	41 50
Other expenses	1,688 55
Total	\$72,758 10

## CONDUCTING TRANSPORTATION.

Engine and roundhouse men	\$42,884 26
Fuel for locomotives	30,528 83
Water supply for locomotives	2,405 75
Oil, tallow and waste for locomotives	2,377 34
Train service	22,405 64
Train supplies and expenses	2,724 57
Switchmen, flagmen and watchmen	16,028 74
Telegraph expenses	4,689 04
Station service	19,434 51
Station supplies	3,743 73
Car mileage—balance	3,282 81
Loss and damage	929 86
Injuries to persons	79 00
Advertising	800 00
Outside agencies	2,000 00
Rents for tracks, yards and terminals	6,900 00
Stationery and printing	2,667 06
Other expenses	552 57
Total	\$163,929 73

## GENERAL EXPENSES.

Salaries of general officers	\$500 00
Salaries of clerks and attendants	1,500 00
Insurance	2,322 24
Law expenses	1,500 00
Stationery and printing (general offices)	800 00
Taxes	9,264 73
Total	\$15,386 97

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	12.72	\$36,747 10
Maintenance of equipment.....	25.20	72,759 10
Conducting transportation.....	56.76	163,929 78
General expenses, including taxes.....	5.32	15,386 97
<b>Total operating expenses and taxes.....</b>	<b>100.00</b>	<b>\$288,821 90</b>
Operating expenses and taxes per mile of road.....	\$4,864 78	
Operating expenses and taxes per train mile run for trains earning revenue, 291.766 miles.....	98.991	
Proportion of operating expenses and taxes for Michigan.....		\$288,821 90
Total proportion of expenses for Michigan.....		288,821 90
Per centage of expenses to earnings.....	110.84	
Net earnings per mile of road.....		3,933 20
Net earnings per train mile.....		80

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Detroit Junction to Fort Gratiot, November, 1859.

## MAIN LINE.

	Miles.
In Michigan, from Detroit Junction to Fort Gratiot .....	59.37
<b>Total length completed.....</b>	<b>59.37</b>
Total length of road belonging to this company in Michigan.....	59.37
Aggregate length in Michigan of sidings, spurs and other tracks not above enumerated.....	25.53
Aggregate length of tracks in Michigan belonging to this company computed as single track.....	85.90

Gauge of track, 4 feet 8½ inches.

## Number of bridges and trestles in Michigan.

	Number.	Aggregate length, feet.
Iron.....	1	792
<b>Total.....</b>	<b>1</b>	<b>792</b>

## Draw bridges in Michigan.

How many on your line?  
One.

Where located, when built and length of draw span?  
Near Port Huron, built in 1859. Length of swing 123 feet.

Character of structure?  
Swing draw.

Material of which constructed.  
Iron and stone.

Height above water, and depth of water under bridge.  
Height, 14 feet; depth, 12 feet.

How swung, by engine or hand power?  
Hand power.

Approaches straight or curved?  
Straight.

Do you require all trains to come to a full stop before crossing a draw, and how are they signaled?  
Yes; by semaphore.

## Crossings—Railroad and highway.

What railroads cross your road at grade in this State, and at what locality?

Detroit & Bay City R. R. at Detroit.  
Detroit, Grand Haven & Milwaukee R. R. at Detroit.  
Belt Line R. R. at Detroit.  
Port Huron and South Western R. R. at Port Huron.  
Chicago & Grand Trunk R. R. near Port Huron.  
Flint & Pere Marquette R. R. at Port Huron.  
Port Huron and North Western R. R. at Port Huron.

At what crossings are interlocking and derailing switches in operation?

Woodward Avenue and Belt Line E. R. at Detroit, and at Chicago & Grand Trunk R'y Junction near Port Huron.

What pattern or patterns have you adopted?

Union Switch & Signal Co.

Number of crossings of highways at grade in this State ..... 90

Number of crossings of highways at grade in this State at which there are gates or flagmen ..... 28

Are your frogs and guard rails blocked as required by act 174, session laws of 1883.

Yes.

How are they treated?

Filled with wood planking.

#### Stations.

Number of stations on whole line ..... 13

Same in Michigan ..... 12

#### Employés.

Number of persons regularly employed on all roads operated by company, including officials ..... 327

Same in Michigan ..... 327

Classify your employés as per following list:

Number.

Baggagemen ..... 9

Brakemen ..... 20

Conductors ..... 14

Engineers ..... 25

Firemen ..... 25

Laborers ..... 56

Yardmen ..... 33

Others ..... 140

#### REPAIRS AND RENEWALS.

##### Fencing in Michigan.

How many miles of fencing have you ..... 122.74

##### Road bed and track.

Number of track sections in Michigan ..... 12

Average length of sections, miles ..... 5

Average number of men in each section gang ..... 4

Number of new ties put in whole line during the year ..... 17,330

Number of new ties put in track in Michigan ..... 17,330

Average number of new ties per mile of road ..... 299

#### ROLLING STOCK.

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?

Yes.

What pattern or patterns have you adopted for use?

Janney and Gould.

How are your passenger cars heated?

Baker heater and steam.

#### MILEAGE, TRAFFIC, ETC.

##### Train mileage.

All in Michigan.

Miles run by passenger trains during the year ..... 191,595

Miles run by freight trains during the year ..... 87,059

Miles run by mixed trains ..... 33,112

Total mileage of trains earning revenue ..... 291,766

##### Passenger traffic.—Road all in State of Michigan.

	Number.	Miles.	Rate.
Number of through passengers carried, earning revenue.....	41,232		
Number of local passengers carried, earning revenue.....	180,268		
Total number of passengers carried, earning revenue.....	221,500		
Number of passengers carried one mile.....	5,160,109		
Average distance carried.....		23.30	
Average amount received from each passenger .....			\$0 55.395
Average receipts per mile for through passengers .....			02.345
Average receipts per mile for local passengers .....			02.406
Average receipts per passenger per mile for all passengers.....			02.378
Estimated cost of carrying each passenger one mile. Cannot state.			

*Freight traffic.—Road all in State of Michigan.*

	Tons.	Miles.	Rate
Number of tons of through freight carried, earning revenue.....	36,742		
Number of tons of local freight carried, earning revenue.....	230,405		
Total tons of freight carried earning revenue.....	267,147		
Total mileage of through freight.....		2,094,337	
Total mileage of local freight.....		5,213,687	
Total freight mileage or tons carried one mile.....		7,308,024	
Average ton haul for through freight.....		57.00	
Average ton haul for local freight.....		22.63	
Average ton haul for all freight.....		27.36	
Average amount received for each ton haul.....			\$0 83.78
Average receipts ton per mile for through freight.....			01.838
Average receipts ton per mile for local freight.....			01.194
Average receipts ton per mile for all freight.....			01.235

## FREIGHT TRAFFIC MOVEMENT.—ROAD ALL IN STATE OF MICHIGAN. .

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	28,760	3,427	32,187	12.05
Flour.....	12,230	122	12,352	4.63
Other mill products.....	904	55	959	.36
Hay.....	29,621	797	30,418	11.39
Tobacco.....	189	22	211	.08
Fruit and vegetables.....	2,774	1,252	4,026	1.51
<b>Products of animals:</b>				
Live stock.....	20,490	605	21,095	7.86
Dressed meats.....	10	514	524	.20
Other packing house products.....	30	1	31	.01
Poultry, game and fish.....	130	20	150	.05
Wool.....	47		47	.02
Hides and leather.....	225	152	377	.14
<b>Products of mines:</b>				
Anthracite coal.....	4,819	10,980	15,799	5.90
Bituminous coal.....		1,586	1,586	.59
Coke.....	567	241	808	.30
Ores.....	175	35	210	.09
Stones, sand and other like articles.....	24,573	1,218	25,793	9.66
<b>Products of forest:</b>				
Lumber.....	19,741	3,156	22,897	8.60
Logs.....				
Shingles.....				
<b>Manufactures:</b>				
Petroleum and other oils.....	1,090	1,950	3,040	1.14
Sugar.....	325	892	1,217	.46
Iron, pig and bloom.....	276	238	514	.20
Iron and steel rails.....	58	103	161	.06
Other castings and machinery.....	2,948	555	3,503	1.31
Bar and sheet metal.....	166	108	274	.10
Cement, brick and lime.....	2,895	844	3,739	1.40
Agricultural implements.....	579	235	814	.30
Wagons, carriages, tools, etc.....	98	55	153	.05
Wines, liquors and beers.....	610	36	646	.24
Household goods and furniture.....	356	394	750	.28
<b>Merchandise.....</b>	<b>11,048</b>	<b>6,534</b>	<b>17,582</b>	<b>6.58</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	9,100	56,202	65,302	24.44
<b>Total tonnage.....</b>	<b>174,836</b>	<b>92,311</b>	<b>267,147</b>	<b>100.00</b>

## MICHIGAN RAILROAD RETURNS, 1896.

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The railway company does its own express business.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
59.87 miles; Western Union Telegraph Company.

*Fast freight lines.*

To what fast freight lines, or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

Name of company.	General office.	Amount paid.
American Refrigerator Transportation Co.....	St. Louis, Mo. ....	\$1 28
Armour Car Lines .....	Chicago, Ill. ....	3 52
Boyd Lunham Provision Express .....	Chicago, Ill. ....	57
Craig Oil Co. ....	Toledo, Ohio .....	96
Canda Cattle Car Co. ....	Chicago, Ill. ....	1 16
Chicago Refrigerator Car Co. ....	Chicago, Ill. ....	1 15
Cottolene Refrigerator Co. ....	Chicago, Ill. ....	42
Commerce Despatch Line .....	Indianapolis, Ind. ....	8 34
Cudahy Milwaukee Refrigerator Line.....	Milwaukee, Wis. ....	14
Detroit Iron Furnace Co. ....	Detroit, Mich. ....	32
Eureka Transportation Co. ....	Indianapolis, Ind. ....	09
Freeman Bros. ....	Pontiac, Mich. ....	20
Hammond Refrigerator Line .....	Hammond, Ind. ....	12 80
Kansas City Dressed Beef Line .....	Kansas City, Mo. ....	43
Kingman & Co. ....	Indianapolis, Ind. ....	61
Lipton Refrigerator Line .....	Chicago, Ill. ....	38
Leonard & Daniels .....	Piqua, Ohio .....	3 25
Manhattan Oil Co. ....	Lima, Ohio .....	9 03
Merchants' Despatch Line .....	New York, N. Y. ....	35 48
Morris Coal & Transportation Company .....	Cleveland, Ohio .....	40 69
National Despatch Line .....	St. Albans, Vt. ....	1,006 23
Chicago, Boston & Liverpool Line .....	St. Albans, Vt. ....	109 23
New York Despatch Refrigerator Line.....	Boston, Mass. ....	67 91
St. Charles Car Co. ....	St. Louis, Mo. ....	51
St. Louis Refrigerator Car Co. ....	St. Louis, Mo. ....	4 36
Streets' Stable Car Lines .....	Chicago, Ill. ....	3 36
Swift Refrigerator Line .....	Chicago, Ill. ....	1 28
Southern Despatch Lumber Line .....	Louisville, Ky. ....	3 38
Sun Oil Co. ....	Toledo, Ohio .....	1 56
Union Tank Line .....	New York, N. Y. ....	53 93
Union Refrigerator Transit Co. ....	St. Louis, Mo. ....	4 69
White Star Transportation Co. ....	Kansas City, Mo. ....	7 67
Western Rolling Stock Equipment Co. ....	Buffalo, N. Y. ....	27

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

## KILLED.

July 22, N. Holman, flagman, W. Detroit. Struck by train; carelessness.  
September 9, H. Young, citizen, Detroit. Struck on crossing; lack of caution.  
November 11, Thomas Brown, messenger, Port Huron. Fell from train; carelessness.  
December 28, H. Loughheed, boy, W. Detroit. Trespasser; carelessness.

## INJURED.

January 10, Alonzo Hock, Laborer, W. Detroit. Trespasser; carelessness.  
June 10, W. Fletcher, brakeman, W. Detroit. Slipped in front of train; lack of caution.  
November 21, G. Gabrielson, stockman, Port Huron. Trespasser; carelessness.



## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Falling from trains.....	-----	1	-----	-----	-----	-----
Getting on and off trains.....	-----	-----	-----	-----	1	-----
Highway crossings.....	-----	-----	1	-----	-----	-----
Miscellaneous.....	-----	1	-----	-----	-----	-----
Trespassers on tracks.....	-----	-----	1	-----	-----	2
Total.....	-----	2	2	-----	1	2

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year.....	4
Number of persons injured during the year.....	3
Number resulting from lack of caution, carelessness, or misconduct.....	4
Trespassers or tramps killed or injured.....	3

## CLASSIFICATION OF EMPLOYÉES.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Brakemen.....	-----	1	1
Not classified above.....	2	-----	2
Total.....	2	1	3

STATE OF MICHIGAN, } ss.  
COUNTY OF WAYNE, }

Almon B. Atwater, superintendent, and James H. Muir accountant, of the Chicago, Detroit & Canada Grand Trunk Junction Railway Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.  
Signed,

Subscribed and sworn to before me this 22d day of April A. D. 1897.  
[L. S.]

A. B. ATWATER,  
JAS. H. MUIR.

LAWRENCE E. LANG,  
Notary Public, Wayne Co., Mich.

ANNUAL REPORT  
OF THE  
CHICAGO & GRAND TRUNK RAILWAY COMPANY,

*For the year ending December 31, 1896.*

[Filed March 27, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President and General Manager*, CHARLES M. HAYS, Montreal, Province of Quebec.  
*Vice President*, WILLIAM J. SPICER, Detroit, Michigan.  
*Secretary*, CHARLES PERCY, Montreal, Province of Quebec.  
*Treasurer*, JAMES H. MUIR, Detroit, Michigan.  
*General Superintendent*, F. H. McGUIGAN, Montreal, Province of Quebec.  
*Superintendent*, A. B. ATWATER, Detroit, Michigan.  
*Assistant Superintendent*, A. R. McINTYRE, Battle Creek, Michigan.  
*Superintendent of Motive Power*, F. W. MORSE, Montreal, Province of Quebec.  
*Superintendent of Car Department*, W. McWOOD, Montreal, Province of Quebec.  
*Master Mechanic*, HERBERT ROBERTS, Fort Gratiot, Michigan.  
*Master Car Builder*, THOMAS SUTHERLAND, Fort Gratiot, Michigan.  
*Chief Engineer*, JOSEPH HOBSON, Montreal, Province of Quebec.  
*Assistant Engineer*, GEORGE MASSON, Detroit, Michigan.  
*General Traffic Manager*, GEORGE B. REEVE, Montreal, Province of Quebec.  
*General Passenger and Ticket Agent*, W. E. DAVIS, Montreal, Province of Quebec.  
*Assistant General Passenger and Ticket Agent*, E. H. HUGHES, Chicago, Illinois.  
*General Freight Agent*, JOHN W. LOUD, Montreal, Province of Quebec.  
*First Assistant General Freight Agent*, DAVID BROWN, Chicago, Illinois.  
*Solicitor*, E. W. MEDDAUGH, Detroit, Michigan.

DIRECTORS.

CHARLES M. HAYS, Montreal, Province of Quebec.  
 E. W. MEDDAUGH, Detroit, Michigan.  
 W. J. SPICER, Detroit, Michigan.  
 W. C. BEARDSLEY, Auburn, New York.  
 F. A. HOWE, Chicago, Illinois.  
 DE. F. SKINNER, Valparaiso, Indiana.  
 GEORGE B. REEVE, Montreal, Province of Quebec.

Terms expire 14th April, 1897, or when successors are appointed.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: 7th January, 1880.  
 Number of stockholders at date of last election: 265.  
 Number of stockholders in Michigan at same date: 18.  
 Amount of full paid stock held in Michigan at same date: \$169,000.  
 Date of annual meeting of stockholders: Second Wednesday in April.  
 Fiscal year of company ends: 31st December.  
 General offices of the company are located at Detroit, Michigan, and Chicago, Illinois.

## GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$3,348,518 00
Total expenses, including capital.....	\$3,118,894 96	
Net income.....		\$231,623 04
Interest on funded debt.....	\$680,000 00	
Interest on unfunded debt.....	89,196 33	
Rental of leased line.....	18,945 50	
		768,141 83
Balance for the year.....	\$531,518 79	
Balance (loss) last year.....	324,640 15	
Items not included in above, as follows:		
Balance of claims paid on account of accident at Nichols, Michigan, on 20th October, 1883.....	110,535 38	
Advances to the Toledo, Saginaw & Muskegon Railway and the Cincinnati, Saginaw & Mackinaw Railroad companies in terms of traffic agreements.....	62,620 53	
Advanced by the Grand Trunk Railway Company of Canada in terms of traffic agreements.....		\$594,139 32
Deficiency, carried forward to next year.....		435,175 53
	<u>\$1,029,314 85</u>	<u>\$1,029,314 85</u>

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$6,600,000 00
Par value of shares.....	\$100 00	
Number of shares issued.....	66,000	
Amount paid in on common.....	\$6,600,000 00	
Total amount paid in as per books of the company.....		\$6,600,000 00
Paid in per mile of road owned by company, 326.5 miles.....		\$20,214 40

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage bonds, 1880.....	6%	1st Jan., 1900...	London, England, and New York.	\$6,000,000 00
Second mortgage bonds, 1882.....	5%	1st Jan., 1900...	New York, N. Y....	6,000,000 00
Total funded debt.....				\$12,000,000 00

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For miscellaneous.....		\$5,293,122 14

## RECAPITULATION.

Total funded debt.....	\$12,000,000 00
Total unfunded debt.....	5,293,122 14
Total debt liabilities.....	\$17,293,122 14
Amount of debt liabilities per mile of road, 326.5 miles.....	52,965 15
Total amount of stock and debt.....	23,893,122 14
Stock and debt per mile of road, 326.5 miles.....	73,179 55

## MICHIGAN RAILROAD RETURNS, 1896.

## GENERAL BALANCE SHEET—Dr.

Construction and equipment accounts .....		\$19,580,204 49
Cash items:		
Cash .....	\$209,618 64	
Due from agents .....	118,199 41	
		327,818 05
Other assets:		
Debit balances from companies and individuals .....		746,627 81
Grand Trunk Railway Company of Canada, for interest coupons pledged as security for advances under traffic agreements .....	\$2,611,224 37	
Toledo, Saginaw & Muskegon Railway Company, for advances under traffic agreement .....	108,618 95	
Cincinnati, Saginaw & Mackinaw Railroad Company, for advances under traffic agreement .....	108,452 94	
		2,828,296 26
Deficiency carried forward to next year .....		435,175 53
Total .....		\$23,893,122 14

## GENERAL BALANCE SHEET—Cr.

Capital stock .....	\$6,600,000 00	
Funded debt .....	12,000,000 00	
		\$18,600,000 00
Unfunded debt:		
Interest unpaid .....	\$224,656 03	
Notes payable .....	54,564 77	
Vouchers and accounts .....	2,187,144 73	
Other liabilities (list as follows):		
Salaries and wages (paid in January, 1897) .....	3,480 35	
Grand Trunk Railway Company of Canada, for advances under traffic agreements .....	2,611,224 37	
Toledo, Saginaw & Muskegon Railway, interest coupons held for advances under traffic agreement .....	108,618 95	
Cincinnati, Saginaw & Mackinaw Railroad, interest coupons held for advances under traffic agreement .....	108,452 94	
		5,293,122 14
Total .....		\$23,893,122 14

## COST OF ROAD AND EQUIPMENT.

When purchased: 7th January, 1880.	
Original cost to present company, of road and equipment .....	\$12,889,800 78
Amount expended since purchase, account of construction .....	5,099,564 37
Amount expended since purchase, account of equipment .....	1,570,839 34
Total cost to date of report .....	19,560,204 49
Average cost per mile of road (not including sidings) 326.5 miles .....	59,908 74
Proportion of cost for Michigan .....	13,419,558 50

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Improvement of track, extensions and new sidings .....	\$50,525 61
New buildings .....	1,772 42
New cars .....	6,200 00
Total charges .....	\$58,498 03
Total charges to property account as above .....	58,498 03
Net addition to property account .....	58,498 03

## ANALYSIS OF EARNINGS.—IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

Main line and branches:		
Local fares .....	\$252,444 23	
Through fares .....	229,487 84	
Total passenger fares .....		\$481,932 07
Express and baggage .....	\$32,875 98	
Mails .....	47,951 76	
Total passenger department earnings .....		562,759 81
Per train mile .....	\$0 89	
Per mile of road .....	2,512 45	

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic .....	\$530,271	21
Through traffic .....	1,071,588	44
Total traffic .....	\$1,601,859	65
Total freight department earnings .....		\$1,601,859 65
Per train mile .....	\$1	07
Per mile of road .....	7,151	16

## ANALYSIS OF EARNINGS.—ENTIRE LINES.

## PASSENGER EARNINGS.

Main line and branches:		
Local fares .....	\$434,466	94
Through fares .....	344,231	77
Total passenger fares .....	\$778,696	71
Express and baggage .....	49,313	96
Mails .....	71,972	64
Other sources .....	21,837	43
Total passenger department earnings .....		\$921,822 76
Per train mile .....	\$0	83
Per mile of road .....	2,749	49

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic .....	\$816,755	86
Through traffic .....	1,607,382	65
Total traffic .....	\$2,424,138	51
Total freight department earnings .....		2,424,138 51
Per train mile .....	\$1	06
Per mile of road .....	7,230	41
Total transportation earnings, entire line .....		\$3,345,961 27
Transportation earnings per mile of road .....	9,979	90
Transportation earnings per train mile .....		99
Miscellaneous receipts from operating account, other than for transportation, as follows:		
From rents not otherwise provided for .....		2,556 73
Total earnings from operation of road .....		\$3,348,518 00
Total earnings per mile of road .....	\$9,987	53
Total earnings per train mile .....	1	00
Proportion of taxable earnings for Michigan .....	2,166,355	26
Total taxable earnings per mile of road in Michigan .....	9,671	23
Total income from all sources .....		3,348,518 00
Proportion of income for Michigan .....		2,166,355 26

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway .....	\$186,957	10
Renewals of rails .....	102,722	00
Renewals of ties .....	72,075	20
Repairs and renewals of bridges and culverts .....	21,068	89
Repairs and renewals of fences, road crossings, signs and cattle guards .....	10,496	54
Repairs and renewals of buildings and fixtures .....	17,196	13
Repairs and renewals of docks and wharves .....	612	72
Stationery and printing .....	277	80
Total .....	\$411,394	88

## MAINTENANCE OF EQUIPMENT.

Superintendence.....	\$7,457 27
Repairs and renewals of locomotives.....	230,144 37
Repairs and renewals of passenger cars.....	50,634 79
Repairs and renewals of freight cars.....	132,665 57
Repairs and renewals of work cars.....	2,666 80
Repairs and renewals of shop machinery and tools.....	38,635 76
Stationery and printing.....	424 90
Other expenses.....	12,742 40
<b>Total.....</b>	<b>\$470,441 86</b>

## CONDUCTING TRANSPORTATION.

Superintendence.....	\$37,297 54
Engine and roundhouse men.....	296,884 50
Fuel for locomotives.....	283,238 68
Water supply for locomotives.....	16,140 27
Oil, tallow and waste for locomotives.....	15,173 25
Other supplies for locomotives.....	9,142 79
Train service.....	235,032 45
Train supplies and expenses.....	88,537 75
Switchmen, flagmen and watchmen.....	101,763 96
Telegraph expenses.....	74,671 24
Station service.....	169,540 43
Station supplies.....	19,119 74
Switching charges—balance.....	44,116 24
Car mileage—balance.....	316,934 05
Hire of equipment.....	104,253 59
Loss and damage.....	20,566 02
Injuries to persons.....	34,996 27
Clearing wrecks.....	861 03
Advertising.....	7,401 12
Outside agencies.....	95,666 81
Commissions.....	13,160 97
Stock yards and elevators.....	4,145 86
Rents for tracks, yards and terminals.....	6,990 13
Rent of buildings and other property.....	3,587 34
Stationery and printing.....	14,802 24
Other expenses.....	6,355 97
<b>Total.....</b>	<b>\$1,971,899 24</b>

## GENERAL EXPENSES.

Salaries of general officers.....	\$17,402 20
Salaries of clerks and attendants.....	26,186 75
General office expenses and supplies.....	2,065 82
Insurance.....	11,430 02
Law expenses.....	20,067 61
Stationery and printing (general offices).....	550 75
Taxes.....	185,426 33
<b>Total.....</b>	<b>\$263,159 48</b>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	13.20	\$411,894 38
Maintenance of equipment.....	15.09	470,441 86
Conducting transportation.....	63.27	1,971,899 24
General expenses, including taxes.....	8.44	263,159 48
<b>Total operating expenses and taxes.....</b>	<b>100.00</b>	<b>\$3,116,894 96</b>
Operating expenses and taxes per mile of road.....		9.296 67
Operating expenses and taxes per train mile run, for trains, earning revenue, 3,363,036 miles.....	.93	
Proportion of operating expenses and taxes for Michigan.....		2,013,748 65
Total proportion of expenses for Michigan.....		2,013,748 65
Percentage of expenses to earnings.....	93.08	
Net earnings per mile of road.....		690 86
Net earnings per train mile.....		07

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Port Huron, Michigan, to Chicago, Illinois, 1st February, 1880.

MAIN LINE.		Miles.	Miles.
In Michigan, from Port Huron, Mich., to Michigan and Indiana State line...		224	
In Indiana, from Michigan and Indiana State line to Indiana and Illinois State line .....		80.62	
In Illinois, from Indiana and Illinois State line to Elsdon, Ill.....		21.88	
Total length completed .....			326.50
Length of double track on main line .....	20.11		
Total length of road belonging to this company .....			326.50
Total length of road belonging to this company in Michigan .....		224	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated..			65.04
Aggregate length of tracks in Michigan belonging to this company, computed as single track.....			289.04

Gauge of track, 4 feet 8½ inches.

*Proprietary or leased roads operated by this company.*

Name, description and length of each:

	Total miles.	In Michigan.
Grand Trunk Junction Railway, from Elsdon, Ill., to junction with the Chicago & Western Indiana Railroad .....	3.90	
Chicago & Western Indiana Railroad Company between junction with Grand Trunk Junction Railway and Polk street depot, Chicago, Ill.....	4.87	
Total .....	8.77	
Total miles operated by this company .....	325.27	224

*Number of bridges and trestles in Michigan.*

	Number.	Aggregate length feet.
Iron .....	22	2,025
Wooden trestles .....	42	1,332
Total .....	64	3,357

*Crossings.—Railroad and highway.*

What railroads cross your road at grade in this State, and at what locality?

Flint & Pere Marquette R. R. at Tunnel station in Port Huron, at Flint, and at Grand Trunk Junction near Port Huron.  
Grand Trunk R'y near Port Huron.  
Detroit & Bay City R. R. at Lapeer.  
Detroit, Grand Haven & Milwaukee R'y at Durand.  
Cincinnati, Saginaw & Mackinaw R. R. at Durand.  
Ann Arbor R. R. at Durand.  
Detroit, Lansing & Northern R. R. at Trowbridge.  
Michigan Central R. R. at Lansing, Charlotte, Nichols and Cassopolis.  
Lake Shore & Michigan Southern R'y at Lansing and Schoolcraft.  
Cincinnati, Jackson & Mackinaw R. R. at Battle Creek.  
Grand Rapids & Indiana R. R. at Vicksburg.

What railroads cross your road either over or under your grade in this State, and where?

Under:  
Pontiac, Oxford & Northern R. R. near Imlay City.

At what crossings are interlocking and derailing switches in operation?

Grand Trunk Junction, Lapeer, Trowbridge, Lansing, Nichols, Schoolcraft and Cassopolis.

What pattern or patterns have you adopted?

Union Switch & Signal Company.

Number of crossings of highways at grade in this State.....	263
Number of crossings of highways at grade in this State at which there are gates or flagmen.....	18
Number of crossings at which there are electric or automatic signals.....	18

What pattern or patterns in use?

2 O'Neil, 1 American Signal Co. highway crossing alarm, 1 Morgan, and 9 push button electric skeleton bells worked by flagmen or operator.

Number of crossings of highways over or under railroad: over, 2; under, 2.....	4
Number of highway bridges, 18 feet above track.....	2

Have safety guards been erected at overhead obstructions?  
Yes.

Are your frogs and guard rails blocked as required by act 174, Session Laws of 1883?  
Yes.

How are they treated?  
Hart's patent blocking and plank.

#### Stations.

Number of stations on whole lines.....	74
Same in Michigan.....	46

#### Employees.

Number of persons regularly employed on all roads operated by company, including officials.....	2,914
Same in Michigan.....	1,947

Classify your employees as per following list:

	Number.
Baggagemen.....	86
Brakemen.....	225
Conductors.....	100
Engineers.....	134
Firemen.....	134
Laborers.....	830
Shopmen.....	624
Yardmen.....	92
Others.....	739

#### REPAIRS AND RENEWALS.

##### Fencing in Michigan.

How many miles of fencing have you?.....	456
------------------------------------------	-----

##### Road bed and track.

Number of track sections in Michigan.....	45
Average lengths of sections, miles.....	5
Average number of men in each section gang.....	5
Number of new ties put in whole line and sidings during the year.....	204,459
Number of new ties put in track and sidings in Michigan.....	153,342
Average number of new ties per mile of road and sidings.....	435
New rails put in track:	
Steel [tons, 10,132], miles.....	96
Total miles of track laid with new rails.....	96

##### Bridges and culverts.

Amount of trestle work replaced with earth during the year, linear feet.....	150
------------------------------------------------------------------------------	-----

Timber culverts replaced during the year:

	Number.
With iron pipe.....	12
With timber.....	12



## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender .....	130	\$974 000 00
Number of passenger cars—12 wheel, including official cars .....	12	\$46,000 00
Number of passenger cars—8 wheel, including official cars .....	18	68,000 00
Number of express and baggage cars .....	19	37,800 00
Number of box freight cars .....	148	50,990 00
Number of stock cars .....	15	4,500 00
Number of platform cars .....	145	32,210 00
Number of conductors' way cars .....	63	37,500 00
Other cars .....	10	15,650 00
<b>Total .....</b>	<b>430</b>	<b>\$290,650 00</b>
Number of locomotives equipped with power brakes .....		130
Number of passenger-train cars equipped with power brakes .....		49
Number of freight cars equipped with power brakes .....		16
What patterns of power brakes have you in use, and number of locomotives and cars with each?		
Locomotives, with Westinghouse air brakes .....		106
Locomotives, with Eames air brakes .....		22
Cars, with Westinghouse air brakes .....		65
<b>Total .....</b>		<b>195</b>

Are your freight cars being equipped with automatic couplers as required by Act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1877?

Yes.

What pattern or patterns have you adopted for use?

Gould and Janney.

How are your passenger cars heated?

Baker heater (hot water), and steam heat.

## MILEAGE, TRAFFIC, ETC.

	Train mileage.	Entire lines.	In Michigan.
Miles run by passenger trains during the year .....		1,093 087	664,216
Miles run by freight trains during the year .....		2,063,696	1,375,784
Miles run by mixed trains .....		206,273	137,515
<b>Total mileage of trains earning revenue .....</b>		<b>3,363,056</b>	<b>2,177,515</b>

## Passenger traffic.—Entire lines.

	Number.	Miles.	Rate.
Number of through passengers carried, earning revenue .....	68,606		
Number of local passengers carried, earning revenue .....	1,129,778		
<b>Total number of passengers carried, earning revenue .....</b>	<b>1,198,384</b>		
Number of passengers carried one mile .....	47,545,643		
Average distance carried .....		39.7	
Average amount received from each passenger .....			\$0 64.96
Average receipts per mile for through passengers .....			01.50
Average receipts per mile for local passengers .....			01.77
Average receipts per passenger per mile for all passengers .....			01.64

## Passenger traffic.—In State of Michigan.

Number of through passengers carried, earning revenue .....	68,606		
Number of local passengers carried, earning revenue .....	291,778		
<b>Total number of passengers carried, earning revenue .....</b>	<b>360,384</b>		
Number of passengers carried one mile .....	29,392,423		
Average distance carried .....		81.6	
Average amount received from each passenger .....			\$1 33.73
Average receipts per mile for through passengers .....			01.49
Average receipts per mile for local passengers .....			01.80
Average receipts per passenger per mile for all passengers .....			01.64

## MICHIGAN RAILROAD RETURNS, 1896.

<i>Freight traffic.—Entire lines.</i>			
	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	1,055,851		
Number of tons of local freight carried, earning revenue.....	632,754		
Total tons of freight carried, earning revenue .....	1,688,405		
Total mileage of through freight .....		347,694,231	
Total mileage of local freight.....		87,395,040	
Total freight mileage or tons carried one mile .....		435,089,271	
Average ton haul for through freight .....		329.4	
Average ton haul for local freight.....		138.1	
Average ton haul for all freight .....		257.7	
Average amount received for each ton haul.....			\$1 43.58
Average receipts ton per mile, for through freight.....			00.46
Average receipts ton per mile, for local freight.....			00.98
Average receipts ton per mile, for all freight.....			00.56

<i>Freight traffic.—In State of Michigan.</i>			
Number of tons of through freight carried, earning revenue....	1,055,351		
Number of tons of local freight carried, earning revenue.....	421,836		
Total tons of freight carried, earning revenue.....	1,477,487		
Total mileage of through freight.....		231,796,154	
Total mileage of local freight.....		58,263,360	
Total freight mileage or tons carried one mile.....		290,059,514	
Average ton haul for through freight.....		219.6	
Average ton haul for local freight.....		138.1	
Average ton haul for all freight.....		196.3	
Average amount received for each ton haul.....			\$1 08.42
Average receipts ton per mile, for through freight.....			00.46
Average receipts ton per mile, for local freight.....			00.91
Average receipts ton per mile, for all freight.....			00.85

## FREIGHT TRAFFIC MOVEMENT.—ENTIRE LINES.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain .....	49,984	241,228	291,212	17.25
Flour .....	8,382	30,320	38,702	2.29
Other mill products .....	5,496	23,917	29,415	1.74
Hay .....	20,613	10,163	30,776	2.36
Tobacco .....	5	341	346	.03
Cotton .....		13,697	13,697	.81
Fruit and vegetables .....	14,628	36,718	51,346	3.04
Potatoes .....	1,625	4,079	5,704	.34
<b>Products of animals:</b>				
Live stock .....	14,763	258,185	272,948	16.17
Dressed meats .....	93,815	31,488	125,303	7.42
Other packing house products .....	52,413	15,306	67,721	4.01
Poultry, game and fish .....	2,762	6,354	9,116	.54
Wool .....	399	653	1,052	.06
Hides and leather .....	1,277	21,916	23,193	1.37
<b>Products of mines:</b>				
Anthracite coal .....	90	104,888	104,978	6.22
Bituminous coal .....	100	16,281	16,381	.97
Coke .....	1	894	895	.05
Ores .....		1,351	1,351	.08
Stone, sand, and other like articles .....	1,466	25,113	26,559	1.57
Salt .....	24	10,590	10,614	.63
<b>Products of forest:</b>				
Lumber .....	12,590	72,700	85,290	5.05
Logs .....	2,941	6,198	9,139	.54
Shingles .....	1,399	8,077	9,476	.56
<b>Manufactures:</b>				
Petroleum and other oils .....	1,002	6,232	7,234	.43
Sugar .....	61	16,661	16,722	.99
Naval stores .....		918	918	.05
Iron, pig and bloom .....	765	5,315	6,080	.36
Iron and steel rails .....	111	7,465	7,576	.45
Other castings and machinery .....	2,945	7,087	10,032	.60
Bar and sheet metal .....	515	1,508	2,023	.12
Cement, brick and lime .....	1,817	6,215	8,032	.48
Agricultural implements .....	3,224	2,588	5,812	.34
Wagons, carriages, tools, etc. ....	5,915	1,891	7,806	.47
Wines, liquors and beers .....	238	3,715	3,953	.23
Household goods and furniture .....	1,997	2,771	4,768	.28
<b>Merchandise .....</b>	<b>39,503</b>	<b>92,033</b>	<b>131,536</b>	<b>7.79</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above. ....	81,023	180,626	241,649	14.31
<b>Total tonnage .....</b>	<b>432,371</b>	<b>1,255,534</b>	<b>1,688,405</b>	<b>100.00</b>

## FREIGHT TRAFFIC MOVEMENT.—IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	41,520	200,035	241,555	16.36
Flour.....	7,069	24,902	31,991	2.17
Other mill products.....	4,156	19,926	24,082	1.63
Hay.....	24,960	8,468	33,418	2.26
Cotton.....	-----	10,976	10,976	.74
Fruit and vegetables.....	11,680	30,724	42,354	2.87
Potatoes.....	1,328	3,328	4,656	.32
<b>Products of animals:</b>				
Live stock.....	12,768	256,875	269,638	18.25
Dressed meats.....	98,815	31,488	135,303	8.48
Other packing house products.....	52,413	15,306	67,721	4.58
Poultry, game and fish.....	2,241	4,982	7,223	.49
Wool.....	250	521	771	.05
Hides and leather.....	996	19,362	20,358	1.37
<b>Products of mines:</b>				
Anthracite coal.....	75	87,392	87,467	5.92
Bituminous coal.....	83	13,281	13,364	.91
Coke.....	1	727	728	.05
Ores.....	-----	1,079	1,079	.07
Stone, sand, and other like articles.....	1,162	20,283	21,445	1.45
Salt.....	19	8,191	8,210	.56
<b>Products of forest:</b>				
Lumber.....	10,795	59,582	70,377	4.76
Logs.....	2,407	6,198	8,605	.58
Shingles.....	1,160	7,082	8,242	.56
<b>Manufactures:</b>				
Petroleum and other oils.....	830	4,728	5,558	.36
Sugar.....	50	12,392	12,442	.84
Naval stores.....	-----	747	747	.05
Iron, pig and bloom.....	660	4,128	4,788	.32
Iron and steel rails.....	93	5,922	6,015	.41
Other castings and machinery.....	2,490	5,523	8,013	.54
Bar and sheet metal.....	415	1,129	1,544	.11
Cement, brick and lime.....	1,494	1,050	2,544	.17
Agricultural implements.....	2,656	2,019	4,675	.32
Wagons, carriages, tools, etc.....	4,980	1,623	6,503	.44
Wines, liquors and beers.....	190	2,492	2,682	.18
Household goods and furniture.....	1,662	2,163	3,825	.26
<b>Merchandise.....</b>	<b>32,785</b>	<b>80,726</b>	<b>113,511</b>	<b>7.68</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	67,235	137,842	205,077	13.88
<b>Total tonnage.....</b>	<b>384,393</b>	<b>1,093,094</b>	<b>1,477,487</b>	<b>100.00</b>

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

National Express Company pays \$50 per day for local business averaging 7,000 lbs per day; also \$70.48 per day for through business averaging 14,000 lbs. per day. Annual payment for through and local business to be not less than \$40,000. Freight taken at trains.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
Western Union Telegraph Company.

## TRANSPORTATION COMPANIES.

*Sleeping, drawing-room and palace car companies.*

What sleeping, drawing-room, chair or other palace passenger cars, not the exclusive property of your own or some other railroad company, have, during the year, been in use on your road in the State of Michigan, and on what terms? If rented by you, or allowed mileage between local points in this State, what was the amount paid for the use of such cars during the period under report?

Name of company.	General office.	Amount paid.
Wagner Palace Car Co.....	New York, N. Y. (On mileage basis)	\$224 50
Pullman's Palace Car Co.....	Chicago, Ill. (On mileage basis)....	34,780 78
Total .....		\$35,015 28

Both these companies get the fares for seats and berths.

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

## KILLED.

January 11, Horace Pratt, trespasser, Flint. Walking on track; his carelessness; inquest "Company exonerated."

January 12, Wm. Donoghue, brakeman, Nichols. Caught between cars; accidental; inquest, "Company exonerated."

February 19, A. Cannon, brakeman, Marcellus. Rear collision; no inquest.

June 30, Isaac T. Barton, trespasser, Battle Creek. Walking on track; inquest, "Company exonerated."

July 15, S. Bombonnais, sectionman, Goodell's. Walking on track; inquest, "Struck by cars," intoxicated.

August 11, unknown man, Haslett Park. Stealing a ride; inquest, "Company exonerated."

October 14, E. B. Sprowl, laborer, trespasser, Flint. His carelessness; No inquest.

## INJURED.

July 4, Fred Robinson, citizen, Edwardsburg. Highway collision; lack of caution.

September 12, Jacob Detwiler, brakeman, Nichols. Coupling; lack of caution.

September 25, W. Hutchinson, trespasser, Durand. Fell from train; lack of caution.

October 4, O. D. Glove, fireman, Imlay City. Jumped off engine; lack of caution.

October 27, W. H. Finch, yard brakeman, Durand. Four toes run over; lack of caution.

December 3, P. J. Cloughesy, Tunnel Junction. Fell from train; lack of caution.

December 17, Andrew Downey, tramp, Charlotte. Stealing a ride and fell from train; lack of caution.

## MICHIGAN RAILROAD RETURNS, 1896.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....		1				
Coupling cars.....					1	
Falling from trains.....					1	
Getting on and off trains.....					1	
Highway crossings.....						1
Miscellaneous.....		2			1	
Trespassers on trains.....			1			2
Trespassers on tracks.....			3			
Total.....		3	4		4	3

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year.....	7
Number of persons injured during the year.....	7
Number of casualties purely accidental.....	1
Number resulting from lack of caution, carelessness or misconduct.....	13
Persons killed or injured while intoxicated.....	1
Trespassers and tramps killed or injured.....	6

## CLASSIFICATION OF EMPLOYÉS.

## KILLED AND INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Brakemen.....	2	3	5
Trainmen.....		1	1
Laborers.....	1		1
Total.....	3	4	7

STATE OF MICHIGAN, } ss.  
COUNTY OF WAYNE.

Almon B. Atwater, superintendent, and James H. Muir, treasurer, of the Chicago and Grand Trunk Railway Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF E. E.]

Signed,

A. B. ATWATER.  
JAS. H. MUIR.

Subscribed and sworn to before me this 26th day of March, A. D. 1897.

LAWRENCE F. LANG,  
Notary Public, County of Wayne.

ANNUAL REPORT  
OF THE  
CHICAGO, KALAMAZOO & SAGINAW RAILWAY COMPANY,

*For the year ending December 31, 1896.*

[Filed May 1, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President, E. WOODBURY, Kalamazoo.*  
*Vice President, J. H. DEWING, Kalamazoo.*  
*Secretary, H. C. POTTER, Kalamazoo.*  
*Auditor, H. C. POTTER, Kalamazoo.*  
*Treasurer, H. C. POTTER, Kalamazoo.*  
*General Manager, J. H. DEWING, Kalamazoo.*  
*General Superintendent, L. SERGEANT, Kalamazoo.*  
*General Passenger Agent, H. C. POTTER, Kalamazoo.*  
*General Freight Agent, H. C. POTTER, Kalamazoo.*

DIRECTORS.

*E. WOODBURY, Kalamazoo, Mich.*  
*J. H. DEWING, Kalamazoo, Mich.*  
*JAMES MONROE, Kalamazoo, Mich.*  
*O. M. ALLEN, Kalamazoo, Mich.*  
*B. A. BUSH, Kalamazoo, Mich.*  
*LEWIS H. WITHEY, Grand Rapids, Mich.*  
*ALFRED E. WATSON, Hartford, Vt.*  
 Terms expire September 14, 1897.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: January 7, 1883. Amended December 10, 1887.  
 Number of stockholders at date of last election: 8.  
 Number of stockholders in Michigan at same date: 7.  
 Amount of full paid stock held in Michigan at same date: \$449,900.  
 Date of annual meeting of stockholders: Second Tuesday in September.  
 Fiscal year of company ends: December 31.  
 General offices of the company are located at Kalamazoo, Mich.

GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$52,110 51
Total expenses, including taxes.....	\$34,436 56	
Net income .....		\$17,673 95
Interest on funded debt.....	14,368 52	
Balance applicable to dividends.....		\$3,305 43
Items not included in above, as follows:		
Paid on unfunded debt.....	3,305 43	

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$2,000,000 00
Par value of shares.....	\$100 00	
Number of shares issued.....	4,500	
Amount paid in on common.....		\$450,000 00
Total amount paid in, as per books of the company.....		\$450,000 00
Paid in per mile of road owned by company, 44.20 miles.....		10,181 00

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

\$225,000 00 first mortgage, 6%, 5 year bonds, authorized to be issued by the Union Trust Co., of Detroit, as trustee, but said bonds have not been sold and are in the hands of the company.

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated.	Amount.
For miscellaneous.....	To be funded and paid from earnings.....	\$529,175 39

## RECAPITULATION.

Total debt liabilities.....	\$529,175 39
Amount of debt liabilities per mile of road, 44.20 miles.....	11,972 27
Total amount of stock and debt.....	979,175 39
Stock and debt per mile of road, 44.20 miles.....	22,153 27

## GENERAL BALANCE SHEET.—Dr.

Construction and equipment account.....	\$902,514 40
Cash items:	
Cash.....	\$1,929 18
Bills receivable.....	67,925 00
Due from agents.....	2,407 43
	72,261 61
Other assets:	
Materials and supplies.....	1,166 36
Debit balances from companies and individuals.....	3,293 02
Total.....	979,175 39

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$450,000 00
Unfunded debt:	
Notes payable.....	\$496,175 00
Vouchers and accounts.....	31,958 18
Other liabilities (list as follows):	
Taxes for 1896.....	1,042 21
Total.....	979,175 39

## COST OF ROAD AND EQUIPMENT.

## PURCHASED BY PRESENT COMPANY.

When purchased: Received from Construction Co., January 1, 1896.....	
Original cost to present company, of road and equipment.....	\$900,000 00
Amount expended since purchase, account of construction.....	1,714 40
Amount expended since purchase, account of equipment.....	800 00
Total cost to date of report.....	\$902,514 40
Average cost per mile of road (not including sidings), 44.20 miles.....	20,418 87



# CHICAGO KALAMAZOO & SAGINAW RAILWAY COMPANY. 61

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

### MAIN LINE.

Extensions and new sidings.....	\$1,510 76
New fences.....	208 64
New cars.....	800 00
Total.....	\$2,514 40
Total charges to property account as above.....	2,514 40
Net addition to property account.....	<u>2,514 40</u>

## ANALYSIS OF EARNINGS.—IN STATE OF MICHIGAN.

### PASSENGER EARNINGS.

Main line and branches:	
Local fares.....	\$15,707 86
Through fares.....	1,870 78
Total passenger fares.....	\$17,578 64
Express and baggage.....	870 42
Mails.....	1,923 60
Other sources.....	226 40
Total passenger department earnings.....	\$20,639 06
Per train mile.....	90 36.1
Per mile of road.....	466 94

### FREIGHT EARNINGS.

Main line and branches:	
Total traffic.....	\$31,225 04
Other sources—freight department.....	246 41
Total freight department earnings.....	31,471 45
Per train mile.....	\$1 18
Per mile of road.....	712 02
Total transportation earnings, entire line.....	\$52,110 51
Transportation earnings per mile of road.....	1,178 97
Transportation earnings per train mile.....	61.3
Total earnings from operation of road.....	52,110 51
Total earnings per mile of road.....	1,178 97
Total earnings per train mile.....	61.3
Proportion of income for Michigan.....	<u>\$52,110 51</u>

## ANALYSIS OF EXPENSES.

### MAINTENANCE OF WAY AND STRUCTURES.

Total.....	\$6,480 53
------------	------------

### MAINTENANCE OF EQUIPMENT.

Total.....	3,168 28
------------	----------

### CONDUCTING TRANSPORTATION.

Fuel for locomotives.....	4,485 98
Water supply for locomotives.....	112 28
Oil, tallow and waste for locomotives.....	245 80
Train service.....	6,387 29
Train supplies and expenses.....	94 16
Switchmen, flagmen and watchmen.....	705 04
Telegraph expenses.....	147 33
Station service.....	4,120 97
Station supplies.....	243 32
Switching charges—balance.....	780 59
Car mileage—balance.....	799 66
Loss and damage.....	17 00
Advertising.....	85 25
Outside agencies.....	73 45
Stationery and printing.....	276 17
Total.....	<u>\$18,459 29</u>

## MICHIGAN RAILROAD RETURNS, 1896.

## GENERAL EXPENSES.

Salaries of general officers.....	\$3,300 00
Salaries of clerks and attendants.....	1,442 26
General office expenses and supplies.....	397 20
Insurance.....	101 80
Stationery and printing (general offices).....	50 00
Taxes.....	1,042 21
Total.....	<u>\$6,338 46</u>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	18.8	\$6,480 53
Maintenance of equipment.....	9.2	8,168 28
Conducting transportation.....	53.6	18,459 29
General expenses, including taxes.....	18.4	6,338 46
Total operating expenses and taxes.....		<u>\$34,436 56</u>
Operating expenses and taxes per mile of road.....	779 10	
Operating expenses and taxes per train mile run, for trains, earning revenue, 84.894 miles.....	40.5	
Total proportion of expenses for Michigan.....		34,436 56
Percentage of expenses to earnings, 66%.....		
Net earnings per mile of road.....		399 86
Net earnings per train mile.....	20.8	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Kalamazoo to Woodbury, September 1, 1899.

## MAIN LINE.

In Michigan, from Kalamazoo to Woodbury.....	Miles. 44.20
Total length completed.....	44.20
Aggregate length in Michigan of sidings, spurs and other tracks not above enumerated...	4.09
Aggregate length of tracks in Michigan belonging to this company, computed as single track.....	<u>48.29</u>
Gauge of track, 4 feet 8½ inches.	

## Number of bridges and trestles in Michigan.

	Number.	Aggregate length, feet.
Wooden bridges.....	38	1,430

## Crossings.—Railroad and Highway.

What railroads cross your road at grade in this State, and at what locality?  
C. J. & M. R. R. at Richland Junction.  
M. C. B. E. at Hastings.  
L. S. & M. S. R. R. at Kalamazoo.

At what crossings are interlocking and derailling switches in operation?  
All.

What pattern or patterns have you adopted?  
Gavit Int. S. & S. Co.  
Union S. & S. Co.

Number of crossings of highways at grade in this State.....	64
Number of crossings of highways at grade in this State at which there are gates or flagmen.....	<u>1</u>

Are your frogs and guard rails blocked as required by act 174, session laws of 1884?  
Yes.

How are they treated?  
Wood.

## Stations.

Number of stations on whole lines.....	<u>12</u>
----------------------------------------	-----------

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials.....	52
Same in Michigan.....	52
Classify your employes as per following list:	Number.
Baggagemen.....	1
Brakemen.....	1
Conductors.....	2
Engineers.....	2
Firemen.....	3
Laborers.....	21
Yardmen.....	2
Others.....	21

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you?.....	87
------------------------------------------	----

*Road bed and track.*

Number of track sections in Michigan.....	7
Average lengths of sections, miles.....	6½
Average number of men in each section gang.....	5
Number of new ties put in track in Michigan.....	5,000

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender.....	4	\$21,000 00
Total.....	4	\$21,000 00
Number of passenger cars—8-wheel, including official cars.....	2	\$4,000 00
Number of express and baggage cars.....	2	2,100 00
Number of box freight cars.....	2	900 00
Number of platform cars.....	10	2,000 00
Number of conductors' way cars.....	1	150 00
Other cars.....	15	350 00
Total.....	32	\$30,500 00
Number of locomotives equipped with power brakes.....	4	
Number of passenger-train cars equipped with power brakes.....	4	
Number of freight cars equipped with power brakes.....	1	

What patterns of power brakes have you in use, and number of locomotives and cars with each?  
Westinghouse—9.

How are your passenger cars heated?  
Steam from locomotives.

## MILEAGE, TRAFFIC, ETC.

*Train mileage.*

	All in Michigan.
Miles run by passenger trains during the year.....	57,084
Miles run by mixed trains.....	27,810
Total mileage of trains earning revenue.....	84,894

*Passenger Traffic.—In State of Michigan.*

	Number.	Miles.	Rate.
Number of through passengers carried, earning revenue.....	2,970		
Number of local passengers carried, earning revenue.....	38,225		
Total number of passengers carried, earning revenue.....	41,195		
Number of passengers carried one mile.....	684,179		
Average distance carried.....		16.61	
Average amount received from each passenger.....			\$0 43
Average receipts per mile for through passengers.....			02.7
Average receipts per mile for local passengers.....			02.6
Average receipts per passenger per mile for all passengers.....			02.6

## MICHIGAN RAILROAD RETURNS, 1896.

*Freight traffic.—In State of Michigan.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	42,068		
Number of tons of local freight carried, earning revenue.....	18,706		
Total tons of freight carried, earning revenue.....	60,774		
Total mileage of through freight.....		673,781	
Total mileage of local freight.....		419,467	
Total freight mileage or tons carried one mile.....		1,093,248	
Average ton haul for through freight.....		16.01	
Average ton haul for local freight.....		22.42	
Average ton haul for all freight.....		17.93	
Average amount received for each ton haul.....			\$0 51
Average receipts ton per mile, for through freight.....			08
Average receipts ton per mile, for local freight.....			02.2
Average receipts ton per mile, for all freight.....			02.8

## FREIGHT TRAFFIC MOVEMENT.—IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	2,501	324	2,825	4.65
Flour.....	146		146	.24
Other mill products.....	836	11	847	1.39
Hay.....	24	20	44	.07
Fruit and vegetables.....				
Potatoes.....				
<b>Products of animals:</b>				
Live stock.....	1,094		1,094	1.80
Wool.....	42	65	107	.18
<b>Products of mines:</b>				
Anthracite coal.....		27,214	27,214	44.78
Bituminous coal.....	2,565	9	2,574	4.23
Stone, sand and other like articles.....		15	15	.03
Salt.....				
<b>Products of forest:</b>				
Lumber.....				
Logs.....	980	3,229	4,169	6.86
Shingles.....				
<b>Manufactures:</b>				
Petroleum and other oils.....		31	31	.05
Iron, pig and bloom.....	91	334	425	.70
Other castings and machinery.....	12	90	102	.17
Cement, brick and lime.....	1,812	434	2,246	3.69
Agricultural implements.....	99	64	163	.27
Household goods and furniture.....	855		855	1.41
<b>Merchandise.....</b>	<b>4,760</b>	<b>2,395</b>	<b>7,155</b>	<b>11.77</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	6,064	4,698	10,762	17.71
<b>Total tonnage.....</b>	<b>21,831</b>	<b>38,943</b>	<b>60,774</b>	<b>100.00</b>

ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Co. Take freight at depot.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

Forty-five miles, owned by company; operated with telephones.

STATE OF MICHIGAN, } ss.  
COUNTY OF KALAMAZOO, }

J. H. Dewing, general manager, and H. C. Potter, secretary, of the Chicago, Kalamazoo & Saginaw Railway Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF E. R.]

Signed,

J. H. DEWING.  
H. C. POTTER.

Subscribed and sworn to before me this 30th day of April, A. D. 1897.

MARINUS SCHRIER,  
Notary Public.

ANNUAL REPORT  
OF THE  
CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY,

*For the year ending December 31, 1896.*

[ Filed May 17, 1897. ]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, ROSWELL MILLER, Chicago.  
*Vice President*, FRANK S. BOND, New York.  
*Secretary*, P. M. MYERS, Milwaukee.  
*General Auditor*, W. N. D. WINNE, Chicago.  
*Treasurer*, F. G. RANNEY, Chicago.  
*Second Vice President and General Manager*, A. J. EARLING, Chicago.  
*General Superintendent*, W. G. COLLINS, Chicago.  
*Assistant General Superintendent in Michigan*, W. J. UNDERWOOD, Milwaukee.  
*Division Superintendent in Michigan*, R. E. MINTURN, Green Bay.  
*Chief Engineer*, D. W. WHITTEMORE, Chicago.  
*Superintendent of Telegraph*, U. J. FREY, Milwaukee.  
*General Passenger and Ticket Agent*, G. H. HEAFFORD, Chicago.  
*General Freight Agent*, J. H. HILAND, Chicago.  
*General Counsel*, Geo. R. PECK, Chicago.

DIRECTORS.

PHILIP D. ARMOUR, Chicago.  
 AUGUST BELMONT, New York.  
 FRANK S. BOND, New York.  
 CHARLES H. COSTER, New York.  
 CHARLES D. DICKEY, JR., New York.  
 PETER GEDDES, New York.  
 FREDERICK LAYTON, Milwaukee.  
 JOSEPH MILLBANK, New York.  
 ROSWELL MILLER, Chicago.  
 J. M. MCKINLAY, New York.  
 WM. ROCKEFELLER, New York.  
 SAMUEL SPENCER, New York.  
 A. VANSANTVOORD, New York.

Terms expire September, 1897.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: May 5, 1863.  
 Number of stockholders at date of last election: 4,766.  
 Number of stockholders in Michigan at same date: 14.  
 Amount of full paid stock held in Michigan at same date: \$56,100.00.  
 Date of annual meeting of stockholders: September.  
 Fiscal year of company ends June 30.  
 General offices of the company are located at Chicago, Ill.

## GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation .....		\$31,352,339 67
Total expenses, including taxes .....	\$19,465,067 38	
Net income .....		\$11,887,302 29
Interest on funded debt .....	\$7,573,104 01	
Balance applicable to dividends .....		\$4,314,198 28
Dividends declared, 7 per cent preferred .....	\$1,872,178 00	
Dividends declared, 4 per cent common .....	1,841,090 44	3,713,268 44
Balance for the year .....		600,929 84
Balance (profit and loss) last year .....		8,081,481 64
		\$8,682,411 48
Items not included in above, as follows:		
Income from other sources .....	\$302,577 67	
Less other deductions .....	229,830 00	
		72,747 67
Balance forward to next year .....		\$8,705,159 15

## ANALYSIS OF CAPITAL STOCK.

Par value of shares .....	\$100 00	
Number of shares issued .....	73,313,161	
Amount paid in on common .....	\$46,027,261 00	
Amount paid in on preferred .....	27,285,900 00	
Total amount paid in as per books of the company .....		\$73,313,161 00
Paid in per mile of road owned by company, 6,150.75 miles .....		11,919 39

MICHIGAN RAILROAD RETURNS, 1893.

ANALYSIS OF DEBT ACCOUNTS.  
FUNDED DEBT.

Description of bonds.	Time.		Amount outstanding.	Interest.			Amount accrued during the year.	Amount paid during the year.
	Date of issue.	When due.		Rate.	When payable.			
Iowa & Minnesota division	1867	1897	\$1,736,000 00	7 per cent.	Jan. and July	\$146,790 00	\$146,800 00	
Prairie du Chien division 1st mortgage	1867	1896	3,674,000 00	" "	Feb. and Aug.	238,920 00	238,930 00	
Prairie du Chien division 2d mortgage	1867	1896	1,108,000 00	7 3/8	" "	82,032 00	81,859 50	
Chicago & Milwaukee division	1873	1903	2,393,000 00	" "	Jan. and July	167,510 00	167,730 00	
St Paul (or River) division	1872	1902	3,384,000 00	7	" "	235,180 00	234,990 00	
St Paul (or River) division, Sterling	1872	1902	432,500 00	7	" "	30,628 00	30,870 00	
Iowa & Dakota division	1869	1899	431,000 00	7	" "	31,080 00	31,010 00	
Hastings & Dakota division	1872	1903	89,000 00	7	" "	6,280 00	6,230 00	
Consolidated mortgage	1874	1904	186,000 00	7	" "	13,020 00	13,020 00	
Consolidated mortgage	1875	1905	11,298,000 00	7	" "	790,930 00	78,690 00	
Terminal mortgage	1884	1914	4,748,000 00	5	" "	237,400 00	237,900 00	
Iowa & Dakota division extension	1878	1908	3,508,000 00	7	" "	245,350 00	245,070 00	
Hastings & Dakota division extension	1880	1910	5,690,000 00	7	" "	397,800 00	393,850 00	
Hastings & Dakota division extension	1880	1910	990,000 00	5	" "	49,500 00	49,800 00	
Southwestern division	1879	1909	4,000,000 00	6	" "	240,000 00	239,670 00	
Lake shore & Lake port division	1879	1919	2,500,000 00	5	" "	125,000 00	125,445 88	
Chicago & Pacific division	1880	1910	3,000,000 00	6	" "	180,000 00	178,760 00	
Chicago & Pacific Western division	1881	1921	25,340,000 00	5	" "	1,267,000 00	1,266,350 00	
Southern Minnesota division	1880	1910	7,432,000 00	6	" "	445,920 00	445,320 00	
Mineral Point division	1880	1910	2,840,000 00	5	" "	142,000 00	138,950 00	
Dubuque division	1880	1920	6,200,000 00	6	" "	368,740 00	368,400 00	
Wisconsin Valley division	1880	1920	2,249,000 00	6	" "	136,200 00	133,920 00	
Wisconsin & Minnesota division	1881	1921	4,755,000 00	5	" "	237,750 00	238,850 00	
Chicago & Lake Superior division	1881	1921	1,360,000 00	5	" "	68,000 00	68,175 00	
Chicago & Mississippi River division	1886	1926	3,083,000 00	5	" "	154,150 00	154,475 00	
Dakota & Great Northern R'y Co.	1886	1916	2,856,000 00	5	" "	142,800 00	142,725 00	
Fargo & Southern R'y Co.	1883	1924	1,250,000 00	6	" "	76,000 00	75,000 00	
Wisconsin Valley R'y Co.	1879	1909	1,106,500 00	7	" "	77,455 00	37,880 00	
Income Savings fund convertible	1896	1916	1,444,000 00	5	" "	72,300 00	72,250 00	
General mortgage	1889	1909	22,173,000 00	4	" "	896,920 00	732,405 27	
Milwaukee & Northern R'y Co., 1st mortgage	1890	1910	2,155,000 00	4	June and Dec	129,300 00	130,170 00	
Milwaukee & Northern R'y Co., consolidated	1884	1913	3,092,000 00	6	" "	305,320 00	241,050 00	
Interest on bonds canceled						15,686 91	46,009 86	
Less int. accrued on bonds held in the treasury of the company						\$7,816,747 91	\$7,875,815 26	
Total			\$138,580,000 00			\$7,611,928 18	\$7,675,815 26	

a Bonds thus designated are convertible into preferred stock at any time within ten days after a dividend becomes payable on said preferred stock.  
b Bonds thus designated are convertible into preferred stock at any time within fifteen days after a dividend becomes payable on said preferred stock.  
c Bonds thus designated are convertible into common stock at any time within sixty days after any dividend becomes payable on the stock of the company.  
The authorized issue of these bonds is \$5,000,000, of which but \$2,000,000 have been sold.  
d Bonds thus designated are payable, principal and interest, in gold, at the office of the company, in New York.  
e Bonds thus designated are payable, principal and interest, in gold, in London.



# CHICAGO, MILWAUKEE & ST. PAUL RAILWAY CO. 69

## UNFUNDED DEBT.

For miscellaneous.....\$6,096,008 64

## RECAPITULATION.

Total funded debt.....	\$188,580,000 00
Total unfunded debt.....	6,096,008 64
Total debt liabilities.....	\$194,676,008 64
Amount of debt liabilities per mile of road, 6,150.75 miles.....	31,811 69
Total amount of stock and debt.....	211,893,161 00
Stock and debt per mile of road, 6,150.75 miles.....	34,449 97

## GENERAL BALANCE SHEET.—Dr.

Construction and equipment account.....	\$212,453,124 01
Other investments (specifying same):	
Stocks owned.....	\$674,095 42
Bonds owned.....	213,850 00
Real estate.....	13,270 70
	901,216 12
Cash items:	
Cash.....	\$3,688,397 93
Bills receivable.....	2,250,000 00
Due from agents and conductors.....	255,095 01
Due from U. S. government.....	305,749 44
	6,499,242 38
Other assets:	
Materials and supplies.....	\$2,044,327 76
Sinking funds, etc.....	1,037,049 80
Debit balances from companies and individuals.....	1,009,661 44
	4,091,039 00
Bonds in treasury.....	\$4,478,000 00
Stock in treasury.....	4,770 00
	4,482,770 00
Total.....	\$228,427,391 51

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$73,313,161 00
Funded debt.....	138,580,000 00
Sinking funds.....	\$644,724 89
Renewal fund.....	487,154 83
Rolling stock replacement fund.....	401,183 00
	1,733,062 72
Unfunded debt:	
Interest unpaid.....	\$3,646,875 50
Dividends unpaid.....	52,108 32
Vouchers and accounts.....	1,342,461 13
Other liabilities (list as follows):	
Due sundry companies and individuals.....	1,055,060 69
	6,096,008 64
Profit and loss or income accounts.....	8,705,159 15
Total.....	\$228,427,391 51

## COST OF ROAD AND EQUIPMENT.

Total cost for construction and equipment of road and branches built by company.

Total expended for construction and equipment.....	\$212,453,124 01
Average cost per mile of road (not including sidings), 6,150.75 miles.....	34,541 01
Proportion of cost for Michigan, 152.08 miles.....	5,311,328 10

## MICHIGAN RAILROAD RETURNS, 1896.

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE AND BRANCHES.

Extensions and new sidings.....	\$35,932 75
Second track.....	178,738 53
New buildings.....	33,155 83
New fences.....	10,845 89
Machinery and tools.....	6,072 62
New equipment.....	502,036 51
Real estate.....	8,557 95
Bridges.....	10,802 87
Ballasting.....	277,482 86
Discounts.....	53,320 00
Miscellaneous.....	226 00
Total charges.....	\$1,147,171 29
Total charges to property account as above.....	1,147,171 29
Property sold and credited.....	27,749 69
Net addition to property account.....	1,119,421 60

## ANALYSIS OF EARNINGS.—IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

Main line and branches:	
Total passenger fares.....	\$46,531 53
Express and baggage.....	13,445 95
Mails.....	11,810 34
Other sources.....	308 43
Total passenger department earnings.....	\$72,096 25
Per train mile, 67,450 miles.....	\$1 06 89
Per mile of road, 152 08 miles.....	474 07

## FREIGHT EARNINGS.

Main line and branches:	
Total traffic.....	\$166,645 47
Total freight department earnings.....	166,645 47
Per train mile, 150,272 miles.....	\$1 10 90
Per mile of road, 152.08 miles.....	1,095 78

## ANALYSIS OF EARNINGS.—ENTIRE LINES.

## PASSENGER EARNINGS.

Main line and branches:	
Local fares.....	\$5,304,771 68
Through fares.....	627,327 48
Total passenger fares.....	\$5,932,099 16
Express and baggage.....	859,198 98
Mails.....	1,198,797 00
Other sources.....	380,806 45
Total passenger department earnings.....	8,370,901 59
Per train mile, 8,154,051 miles.....	\$1 02 66
Per mile of road, 6,150.75.....	1,360 96

## FREIGHT EARNINGS.

Main line and branches:	
Local traffic.....	\$18,658,835 74
Through traffic.....	4,092,566 43
Total traffic.....	\$22,751,402 17
Total freight department earnings.....	22,751,402 17
Per train mile, 13,926,997.....	\$1 63 36
Per mile of road, 6,150.75.....	3,698 96
Total transportation earnings, entire line.....	\$31,122,303 76
Transportation earnings per mile of road, 6,150.75 miles.....	\$5,059 92
Transportation earnings per train mile, 22,081,048 miles.....	1 40 95

Miscellaneous receipts from operating account, other than for transportation, as follows:

Elevators .....	\$47,222 79
From telegraph companies .....	31,291 16
From rents not otherwise provided for .....	111,479 51
From other sources, stock yards .....	40,092 45

Total ..... \$230,085 91

**DISTRIBUTION OF MISCELLANEOUS EARNINGS BETWEEN MAIN LINE AND LEASED OR PROPRIETARY ROADS.**

	Taxable.	Not taxable.	Total, Michigan.
Freight earnings .....	\$119,865 00	\$46,780 47	\$166,645 47
Passenger earnings .....	38,778 40	7,753 13	46,531 53
Mails .....	9,589 88	2,220 96	11,810 84
Express .....	8,526 80	3,830 76	12,357 56
News .....	224 40		224 40
Extra baggage .....	769 57	319 02	1,088 59
Sleeping cars .....	81 46	2 57	84 03
Rents .....	124 00		124 00
<b>Totals .....</b>	<b>\$177,958 81</b>	<b>\$80,906 91</b>	<b>\$258,865 72</b>

Total earnings from operation of road .....	\$31,352,389 67
Total earnings per mile of road, 6,150.75 miles .....	\$5,097 33
Total earnings per train mile, 22,081,018 miles .....	1 41.99
Proportion of taxable earnings for Michigan .....	177,958 81
Total taxable earnings per mile of road in Michigan, 105.03 miles .....	1,694 36
Income other than from earnings .....	302,577 67
<b>Total income from all sources .....</b>	<b>\$31,654,967 34</b>
Proportion of income for Michigan (proportional) .....	791,374 18

**ANALYSIS OF EXPENSES.**

**MAINTENANCE OF WAY AND STRUCTURES.**

Repairs of roadway .....	\$1,811,812 85
Renewals of rails .....	667,283 04
Renewals of ties .....	896,378 63
Repairs and renewals of bridges and culverts .....	713,663 28
Repairs and renewals of fences, road crossings, signs and cattle guards .....	56,428 47
Repairs and renewals of buildings and fixtures .....	269,199 45
<b>Total .....</b>	<b>\$4,354,735 66</b>

**MAINTENANCE OF EQUIPMENT.**

Repairs and renewals of locomotives .....	\$1,111,368 69
Repairs and renewals of passenger cars .....	1,522,840 71
Repairs and renewals of freight cars .....	
Repairs and renewals of shop machinery and tools .....	73,504 24
<b>Total .....</b>	<b>\$2,707,708 64</b>

**CONDUCTING TRANSPORTATION.**

Engine and roundhouse men .....	\$1,860,084 17
Fuel for locomotives .....	1,918,544 04
Oil, tallow and waste for locomotives .....	110,875 13
Train service .....	1,565,825 41
Train and station supplies and expenses .....	441,352 55
Station service .....	2,664,556 50
Switching charges—Balance .....	332,034 04
Car mileage—Balance .....	217,656 49
Loss and damage .....	70,698 68
Injuries to persons .....	141,415 94
Advertising .....	
Outside agencies .....	159,878 88
Stock yards and elevators .....	35,395 71
Other expenses .....	138,066 70
<b>Total .....</b>	<b>\$9,656,403 24</b>

## MICHIGAN RAILROAD RETURNS, 1896.

## GENERAL EXPENSES.

Salaries of clerks and attendants.....		
General office expenses and supplies.....		
Insurance.....		
Law expenses.....		
Other expenses.....		
Taxes.....		
Total.....		

9067,051 31

88,019 33

188,984 04

258,328 23

1,143,906 88

\$2,296,239 84

## RECAPITULATION OF EXPENSES.

Renewal account.....		
Maintenance of way and structures.....		
Maintenance of equipment.....		
Conducting transportation.....		
General expenses, including taxes.....		
Total operating expenses and taxes.....		
Operating expenses and taxes per mile of road, 6,150.75 miles.....		
Operating expenses and taxes per train mile run, for trains earning revenue, 22,081,048 miles.....		
Proportion of operating expenses and taxes for Michigan, estimated.....		
Total proportion of expenses for Michigan, estimated.....		
Percentage of expenses and taxes to earnings.....	62.08%	
Net earnings per mile of road, 6,150.75 miles.....		
Net earnings per train mile, 22,081,048 miles.....		

\$450,000 00

4,354,735 66

2,707,708 64

9,656,403 24

2,296,239 84

\$19,405,087 38

\$3,164 67

88.15

191,921 94

\$191,921 94

62.08%

1,982 66

53 84

## DESCRIPTION OF ROAD.

## MILES OF ROAD

From	To	Illinois	Wisconsin	Iowa	Minnesota	North Dakota	South Dakota	Missouri	Michigan	Total
Chicago	Milwaukee	45.06	37.92							82.98
Rockford	Libertyville	3.00								3.00
Chicago	Llewellyn Park	13.69								13.69
North Chicago	Pacific Junction	3.39								3.39
Pacific Junction	Savanna	133.18								133.18
Galewood	Dunning	2.96								2.96
Savanna	Council Bluffs	2.30		349.15						351.45
Elk River Junction	Clinton			10.06						10.06
Davenport	Jackson Junction			153.37						153.37
Kidridge	Hurstville			34.61						34.61
Paralta	Farley			43.63						43.63
Marion	Ottumwa			97.00						97.00
Ottumwa Junction	Coburg			62.27				140.27		202.54
Rockford	Kittredge	50.63	69.31							119.94
Stock Yards, Milwaukee	Port Byron Junction	47.70								47.70
Masonville	Eagle		16.59							16.59
Rockton	Rockford	14.94								14.94
Milwaukee	North McGregor		193.75	.12						193.87
Stock Yards, Milwaukee	Merrill Park		80							80
Masonville	Prairie du Sac		10.37							10.37
Lone Rock	Richland Center		16.22							16.22
Milton	Shullsburg		76.84							76.84
Janesville	Beloit		13.36							13.36
Brookfield	New Glarus		22.78							22.78
Warren	Mineral Point	1.01	31.23							32.24
Callamine	Platteville		17.06							17.06
South Milwaukee	La Crosse		196.37							196.37
Watertown Junction	Madison		36.48							36.48
Portage City	East Madison		23.01							23.01
New Lisbon	Necedah		12.74							12.74
Viroqua Junction	Viroqua		32.17							32.17
North La Crosse	Oualaska		3.76							3.76
Tomah	Star Lake		180.30							180.30
Chesham St., Milwaukee	Portage City		100.27							100.27
Merrill Park	North Milwaukee		6.17							6.17
Cement Line Junction	Rock		1.06							1.06
Iron Ridge	Pond du Lac		23.53							23.53
Horicon	Berlin		42.30							42.30
Brandon	Markesan		11.49							11.49
Ripon	Oakbrook		19.09							19.09

## MICHIGAN RAILROAD RETURNS, 1893.

MILES OF ROAD.—Concluded.

From	To	Illinois.	Wisconsin	Iowa.	Minnesota.	North Dakota.	South Dakota.	Missouri.	Michigan.	Total.
Rush Lake Junction	Winneconne		14.89	136.15	24.93					14.89
Sabula Junction	River Junction			36.77						161.11
Bellevue	Cascade			58.34						35.77
Turkey River Junction	West Union			22.95						58.34
Waukon Junction	Waukon									22.95
Reno	Preston				57.77					57.77
North La Crosse	St. Paul		1.39		123.42					129.81
St. Paul	Minneapolis				8.30					8.30
St. Croix Junction	Stillwater				24.78					24.78
Wabasha	Zumbrota				60.21					60.21
Wabasha	Chippewa Falls		61.13		1.89					68.01
Red Cedar Junction	Cedar Falls		20.67							20.67
North McGregor	Chamberlain			291.48			149.77			441.25
Reulah	Elkader			19.20						19.20
Spencer	Spirit Lake			20.18						20.18
Rock Valley	Eden			8.98			39			9.38
Marion Junction	Running Water						62.85			62.85
Calmar	Minneapolis			41.38	180.64					172.02
Conover	Decorah			10.00						10.00
Austin	Mason City			27.95	11.34					39.29
Mendota	St. Paul				5.56					5.56
Northfield	Cannon Junction				31.96					31.96
La Urecent	Woonsocket				238.22		97.20			335.42
Wells	Mankato				38.08					38.08
Madison	Bristol						103.02			103.02
South Minneapolis	Ortonville				177.27					177.27
Glencoe	Hutchinson				13.45					13.45
Hopkins	Lake Minnetonka				7.84					7.84
Ortonville	Fargo				45.23	60.40	1.25			116.87
Ortonville Junction	Aberdeen				1.47		107.02			108.49
Hastings	Benton Junction				53.71					53.71
Milbank	Sisseton						37.24			37.24
Andover	Harlem					17.20	38.71			55.91
Mitchell	Aberdeen						128.31			128.31
Aberdeen	Edgeley					31.61	32.72			64.33
Aberdeen	Bowdle						57.02			57.02
Roscoe	Orlent						40.99			40.99
Roscoe	Eureka						26.39			26.39
Manilla	Sioux City			90.17						90.17
Sioux City	Scotland Junction			5.63			82.23			87.86



## MICHIGAN RAILROAD RETURNS, 1896.

MAIN LINE.		Miles.	Miles.
Length of double track .....			204.53

BRANCHES.			
Total length of road belonging to this company .....			6,150.75
Total length of road belonging to this company in Michigan .....	152.06		
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated .....	48.57		
Aggregate length of tracks in Michigan belonging to this company, computed as single track .....			200.65
Gauge of track, 4 feet 8½ inches .....			5,997.00
Gauge of track, 3 feet .....			153.75

*Proprietary or leased roads operated by this company.*

	Total miles.	In Michigan.
Total miles operated by the company .....	6,150.75	152.06

Number of bridges and trestles in Michigan.			
	Number.	Aggregate length, feet.	
Wooden bridges .....	8	596	
Iron bridges .....	2	190	
Wooden trestles .....	130	12,530	
Total .....	140	13,306	

*Crossings.—Railroad and highway.*

What railroads cross your road at grade in this State, and at what locality?

C. & N. W. R. R. at Waubic, Iron Mountain, Amasa and Champion.

D., S. S. & A. R. R. at Champion, Sidnaw and Republic.

What railroads cross your road either over or under your grade in this State, and where?

Under:

C. & N. W. R. R. at Iron Mountain.

At what crossings are interlocking and derailing switches in operation?

D., S. S. & A. at Republic and Sidnaw.

C. & N. W. at Waubic.

What pattern or patterns have you adopted?

Union Switch and Signal Co. (Farmer & Saxby.)

Number of crossings of highways at grade in this State .....

46

Number of crossings of highways at grade in this State at which there are gates or flagmen .....

5

Number of crossings at which there are electric or automatic signals .....

1

What pattern or patterns in use?

Electric bell.

Number of crossings of highways over or under railroad: under, 2.

Have safety guards been erected at overhead obstructions?

Yes.

Are your frogs and guard rails blocked as required by act 174, session laws of 1883?

Yes.

How are they treated?

Hart's foot-guard and plank.

*Stations.*

Number of stations on whole lines .....	895
Same in Michigan .....	24

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials .....	20,216
Same in Michigan .....	121

Classify your employees as per following list:

	Number.
Baggagemen .....	3
Brakemen .....	5
Conductors .....	4
Engineers .....	4
Firemen .....	4
Laborers .....	75
Yardmen .....	8
Others .....	23



## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you.....	38
Give the number of miles required to complete fence both sides of your track in Michigan, and the counties in which needed:	
Dickinson.....	66
Marquette.....	29
Iron.....	53
Baraga.....	11
Houghton.....	37
Ontonagon.....	28
Total miles required.....	224

*Road bed and track.*

Number of track sections in Michigan.....	20
Average lengths of sections, miles.....	8
Average number of men in each section gang.....	3
Number of new ties put in whole line during the year.....	2,021,806
Number of new ties put in track in Michigan.....	46,500
Average number of new ties per mile of road in Michigan.....	310

*Bridges and culverts.*

Amount of trestle work replaced with earth during the year (linear feet).....	276
	Number.
Timber culverts replaced during the year.....	13
With iron pipe.....	12
With timber.....	6

New bridges built during the year—number:

Location.	Kind.	Material.	Month built.	feet in length.
Menominee.....	Trestle.....	Wood.....		138
Menominee.....	Truss.....	Iron.....		383
Iroa Mountain.....	Deck girder.....	Iron.....		88½
Republic.....	Pile bent.....	Wood.....		44½
Republic.....	Pile bent.....	Wood.....		44½

## ROLLING STOCK.

	Number.
Number of locomotives of more than 30 tons' weight, exclusive of tender.....	821
Number of locomotives of 20 to 30 tons' weight, exclusive of tender.....	18
Number of locomotives of 10 to 20 tons' weight, exclusive of tender.....	5
Total.....	844
Number of passenger cars—12-wheel, including official cars.....	152
Number of passenger cars—8-wheel, including official cars.....	261
Number of express and baggage cars.....	287
Number of box freight cars.....	18,540
Number of refrigerator cars.....	474
Number of stock cars.....	2,503
Number of platform cars.....	5,384
Number of ore cars.....	245
Number of log cars.....	65
Number of conductors' way cars.....	491
Other cars as follows:	
Wrecking, tool cars, etc.....	75
Parlor cars, 16; sleeping cars, 63; dining cars, 8.....	77
Total.....	28,534
Number of locomotives equipped with power brakes.....	760
Number of passenger-train cars equipped with power brakes.....	768
Number of freight cars equipped with power brakes.....	9,800

What patterns of power brakes have you in use, and number of locomotives and cars with each?  
Westinghouse—locomotives, 691; cars, 10,568. Vacuum—locomotives, 6. Steam—locomotives, 68.

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1883, as amended by act No. 88, session laws of 1887?  
Yes.

What pattern or patterns have you adopted for use?  
M. C. B. type.

How are your passenger cars heated?  
Steam.

### MILEAGE, TRAFFIC, ETC.

	Train mileage.	Entire lines. In Michigan.	
Miles run by passenger trains during the year .....	7,904,716	55,795	
Miles run by freight trains during the year .....	13,178,992	115,305	
Miles run by mixed trains .....	997,340	46,622	
Total mileage of trains earning revenue .....	22,081,048	217,722	

	Passenger traffic.—Entire lines.		
	Numbers.	Miles.	Rate.
Number of through passengers carried, earning revenue .....	178,866		
Number of local passengers carried, earning revenue .....	7,152,050		
Total number of passengers carried earning revenue .....	7,330,916		
Number of passengers carried one mile .....	262,766,915		
Average distance carried .....		35.84	
Average amount received from each passenger .....			\$0 80.919
Average receipts per mile for through passengers .....			02.355
Average receipts per mile for local passengers .....			02.247
Average receipts per passenger per mile for all passengers .....			02.258

	Passenger traffic.—In State of Michigan—Proportional.		
	Numbers.	Miles.	Rate.
Number of through passengers carried, earning revenue .....	4,472		
Number of local passengers carried, earning revenue .....	178,801		
Total number of passengers carried earning revenue .....	183,273		
Number of passengers carried one mile .....	6,569,173		
Average distance carried .....		35.84	
Average amount received from each passenger .....			\$0 80.919
Average receipts per mile for through passengers .....			02.353
Average receipts per mile for local passengers .....			02.247
Average receipts per passenger per mile for all passengers .....			02.258

	Freight traffic.—Entire lines.		
	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue .....	2,725,526		
Number of tons of local freight carried, earning revenue .....	9,234,270		
Total tons of freight carried, earning revenue .....	11,959,796		
Total mileage of through freight .....	542,859,753		
Total mileage of local freight .....	1,755,486,904		
Total freight mileage or tons carried one mile .....	2,298,346,657		
Average ton haul for through freight .....		199.18	
Average ton haul for local freight .....		190.11	
Average ton haul for all freight .....		192.17	
Average amount received for each ton haul .....			\$1 80.232
Average receipts ton per mile, for through freight .....			00.754
Average ton receipts per mile, for local freight .....			01.006
Average receipts ton per mile, for all freight .....			00.990

*Freight traffic.—In State of Michigan—Proportional.*

Number of tons of through freight carried, earning revenue.....	68,138	
Number of tons of local freight carried, earning revenue.....	230,857	
Total tons of freight carried, earning revenue.....	298,995	
Total mileage of through freight.....	13,571,494	
Total mileage of local freight.....	43,887,172	
Total freight mileage or tons carried one mile.....	57,458,666	
Average ton haul for through freight.....	199.18	
Average ton haul for local freight.....	190.11	
Average ton haul for all freight.....	192.17	
Average amount received for each ton haul.....		\$1 90.282
Average receipts ton per mile, for through freight.....		00.754
Average receipts ton per mile, for local freight.....		01.006
Average receipts ton per mile, for all freight.....		00.990

## FREIGHT TRAFFIC MOVEMENT.—ENTIRE LINES.

	<i>Company's material excluded.</i>	Whole tons.	Per cent.
Total tonnage.....		11,959,795	100.00

## FREIGHT TRAFFIC MOVEMENT.—IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons	Freight re- ceived from connecting roads and other carriers Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	175	70	245	.04
Flour.....	21	489	490	.06
Other mill products.....	5	28	33	.01
Hay.....	353		353	.06
Tobacco.....	1		1	
Fruit and vegetables.....	108	21	129	.02
<b>Products of animals:</b>				
Live stock.....	424		424	.07
Dressed meats.....	32		32	.01
Other packing house products.....	5	230	235	.04
Poultry, game and fish.....	78	369	447	.06
Hides and leather.....	12		12	
<b>Products of mines:</b>				
Anthracite coal.....	182		182	.03
Bituminous coal.....	1,017		1,017	.18
Ores.....	272,270	12,208	294,478	48.99
Stone, sand and other like articles.....	552	647	1,199	.21
Salt.....	13		13	
<b>Products of forest:</b>				
Lumber.....	46,546	4,849	51,435	8.86
Logs.....	197,619	33,446	231,065	39.79
<b>Manufactures:</b>				
Petroleum and other oils.....	82		82	.01
Iron, pig and bloom.....		364	364	.06
Other castings and machinery.....	70	37	107	.02
Bar and sheet metal.....	1	13	14	
Cement, brick, and lime.....	152		152	.08
Agricultural implements.....	12		12	
Wagons, carriages, tools, etc.....	13		13	
Wines, liquors and beers.....	567		567	.10
Household goods and furniture.....	254	21	275	.05
<b>Merchandise.....</b>	<b>2,969</b>	<b>1,245</b>	<b>4,214</b>	<b>.73</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	1,118	1,931	3,049	.53
<b>Total tonnage.....</b>	<b>524,691</b>	<b>55,948</b>	<b>580,639</b>	<b>100.00</b>

## MICHIGAN RAILROAD RETURNS, 1896.

## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The United States Express Company. Does a general express business. Rates are various and governed by the business done and the facilities furnished. Freights taken at the various depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

608,400 miles of line—21,042.50 miles of wire. For the construction of the telegraph lines, the Western Union Telegraph company or the Northwestern Telegraph company in some cases furnished some material and claim joint ownership. Amount not definitely fixed.

## TRANSPORTATION COMPANIES.

*Sleeping, drawing-room and palace car companies.*

What sleeping, drawing-room, chair or other palace passenger cars, not the exclusive property of your own or some other railroad company, have, during the year, been in use on your road in the State of Michigan, and on what terms? If rented by you, or allowed mileage between local points in this State, what was the amount paid for the use of such cars during the period under report?

Pullman's Palace Car Company, Chicago, Illinois; no compensation; railroad company keeps cars in repair.

*Fast freight lines.*

To what fast freight lines or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid? The cars of all transportation companies are allowed to run over the lines of this company, paying regular rates and receiving mileage.

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

## KILLED.

March 20, J. P. Devaney, switchman, Iron Mountain. Fell from top of car.

## INJURED.

May 2, Geo. Runnels, tramp, Republic. Jumped from moving train; arm broken.  
June 23, V. Johnson, section man, Park Spur. Lying on track; foot cut off.  
Aug. 14, A. Walling, yardmaster, Menominee. Uncoupling cars; finger crushed.  
August 28, C. H. Minnis, switchman, Iron Mountain. Coupling cars; finger crushed.  
November 18, Nels Larson, section man, Menominee. Rail fell on foot; foot bruised.  
December 2, H. Hancock, engineer, Champion. Fell in cab of engine; ankle sprained.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Pas- sengers.	Employés.	Others.	Pas- sengers.	Employés.	Others.
Coupling cars.....					2	
Falling from trains.....		1				
Miscellaneous.....					3	
Trespassers on trains.....						1
Total.....		1			5	1

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year.....	1
Number of persons injured during the year.....	6
Number resulting from lack of caution, carelessness, or misconduct.....	7
Trespassers and tramps killed or injured.....	1

## CLASSIFICATION OF EMPLOYEES.

KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Engineers .....		1	1
Yardmen .....	1	4	5
Total .....	1	5	6

STATE OF ILLINOIS, } ss.  
COUNTY OF COOK, }

F. G. Ranney, treasurer, and W. N. D. Winne, general auditor, of the Chicago, Milwaukee & St. Paul Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF E. E.]

Signed

F. G. RANNEY, Treasurer,  
W. N. D. WINNE, General Auditor.

Subscribed and sworn to before me this 15th day of March, A. D. 1897.

[L. S.]

W. D. MILLARD,  
Notary Public.

**ANNUAL REPORT**  
OF THE  
**CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY,**

[Supplementary.]

*For the year ending December 31, 1896.*

[Filed March 17, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President, ROSWELL MILLER, Chicago.*  
*Vice President, FRANK S. BOND, New York.*  
*Secretary, P. M. MYERS, Milwaukee.*  
*General Auditor, W. N. D. WINNE, Chicago.*  
*Treasurer, F. G. RANNEY, Chicago.*  
*Second Vice President and General Manager, A. J. EARLING, Chicago.*  
*General Superintendent, W. G. COLLINS, Chicago.*  
*Assistant General Superintendent in Michigan, W. J. UNDERWOOD, Milwaukee.*  
*Division Superintendent in Michigan, R. E. MINTURN, Green Bay.*  
*Chief Engineer, D. W. WHITEMORE, Chicago.*  
*Superintendent of Telegraph, U. J. FRY, Milwaukee.*  
*General Passenger and Ticket Agent, G. H. HEAFFORD, Chicago.*  
*General Freight Agent, J. H. HILAND, Chicago.*  
*General Counsel, GEO. R. PECK, Chicago.*

**DIRECTORS.**

PHILIP D. ARMOUR, Chicago  
AUGUST BELMONT, New York.  
FRANK S. BOND, New York.  
CHARLES H. COSTER, New York.  
CHARLES D. DICKEY, Jr., New York.  
PETER GEDDES, New York.  
FREDERICK LAYTON, Milwaukee.  
JOSEPH MILLBANK, New York.  
ROSWELL MILLER, Chicago.  
J. M. MCKINLAY, New York.  
WM. ROCKEFELLER, New York.  
SAMUEL SPENCER, New York.  
A. VANSANTVOORD, New York.  
Terms expire September, 1897.

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: May 5, 1863.  
Number of stockholders at date of last election: 4,766.  
Number of stockholders in Michigan at same date: 14.  
Amount of full paid stock held in Michigan at same date: \$56,100.00.  
Date of annual meeting of stockholders: September.  
Fiscal year of company ends June 30.  
General offices of the company are located at Chicago, Ill.

## ANALYSIS OF EARNINGS.—IN STATE OF MICHIGAN.

PASSENGER EARNINGS.		
Main line and branches:		
Total passenger fares.....	\$7,753 13	
Express and baggage.....	4,149 78	
Mails.....	2,220 96	
Other sources.....	2 57	
Total passenger department earnings.....		\$14,126 44
Per train mile.....	\$1 38.08	
Per mile of road.....	300 24	
FREIGHT EARNINGS.		
Main line and branches:		
Total freight department earnings.....		46,780 47
Per train mile.....	1 18.07	
Per mile of road.....	9 94.27	
	Proportion for Michigan.	
Freight earnings.....	\$46,780 47	
Passenger earnings.....	7,753 13	
Mail earnings.....	2,220 96	
Express earnings.....	3,890 78	
Extra baggage.....	319 02	
Sleeping car.....	2 57	
Total earnings from operation of road.....		\$60,906 91

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Channing to Sidnaw, January 1, 1893.

MAIN LINE.	Miles.
In Michigan, from Channing to Sidnaw.....	47.05
Gauge of track, 4 feet 8½ inches.	
If north of parallel 44 of latitude: Yes.	
Give date road commenced to be built: February, 1892.	
Give date road completed: December, 1892.	
Give date road commenced to be operated: January 1, 1893.	
Where built from and to: Channing to Sidnaw.	
Give exact number of miles: 47.05.	

STATE OF ILLINOIS, } ss.  
COUNTY OF COOK,

F. G. Ranney, Treasurer, and W. N. D. Winne, General Auditor, of the Chicago, Milwaukee & St. Paul Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1892, to the best of their knowledge and belief.

[L. S. OF F. R.]

Signed,

F. G. RANNEY, Treasurer.

W. N. D. WINNE, General Auditor.

Subscribed and sworn to before me this 15th day of March, A. D. 1897.

W. D. MILLARD,  
Notary Public.

# ANNUAL REPORT

## OF THE

### CHICAGO & NORTHWESTERN RAILWAY COMPANY,

*For the year ending December 31, 1896.*

[Filed March 1, 1897.]

#### OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, MARVIN HUGHITT, Chicago, Ill.  
*Vice President*, M. L. SYKES, New York, N. Y.  
*Secretary*, M. L. SYKES, New York, N. Y.  
*Auditor*, J. B. REDFIELD, Chicago, Ill.  
*Treasurer*, M. L. SYKES, New York, N. Y.  
*General Manager*, J. M. WHITMAN, Chicago, Ill.  
*General Superintendent*, S. SANBORN, Chicago, Ill.  
*Assistant General Superintendent*, W. A. GARDNER, Chicago, Ill.  
*Division Superintendents*, { W. B. LINSLEY, Escanaba, Mich.  
                                   { CHARLES H. HARTLEY, Kaukauna, Wis.  
*Lines in Michigan*,  
*Chief Engineer*, JOHN E. BLUNT, Chicago, Ill.  
*Superintendent of Telegraph*, GEORGE H. THAYER, Chicago, Ill.  
*Second Vice President*, M. M. KIRKMAN, Chicago, Ill.  
*General Passenger and Ticket Agent*, W. B. KNISKERN, Chicago, Ill.  
*General Freight Agent*, M. HUGHITT, Jr., Chicago, Ill.  
*General Counsel*, LLOYD W. BOWERS, Chicago, Ill.

#### DIRECTORS.

DAVID P. KIMBALL, Boston, Mass.  
 CHAUNCEY M. DEPEW, New York, N. Y.  
 SAMUEL F. BARGER, New York, N. Y.  
 ALBERT KEEF, Chicago, Ill.  
 M. L. SYKES, New York, N. Y.  
 JAMES C. FARGO, New York, N. Y.  
     Terms expire June, 1897.  
 ZENAS CRANE, Dalton, Mass.  
 OLIVER AMES, Boston, Mass.  
 JAMES STILLMAN, New York, N. Y.  
 MARVIN HUGHITT, Chicago, Ill.  
 N. K. FAIRBANK, Chicago, Ill.  
     Terms expire June, 1898.  
 BYRON L. SMITH, Chicago, Ill.  
 CYRUS H. MCCORMICK, Chicago, Ill.  
 F. W. VANDERBILT, New York, N. Y.  
 W. K. VANDERBILT, New York, N. Y.  
 H. McK. TWOMBLY, New York, N. Y.  
 JOHN I. BLAIR, Blairstown, N. J.  
     Terms expire June, 1899.

#### STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: June 7, 1859.  
 Number of stockholders at date of last election: 5,247.  
 Number of stockholders in Michigan at same date: 18.  
 Amount of full paid stock held in Michigan at same date: \$167,500.  
 Date of annual meeting of stockholders: First Thursday in June.  
 Fiscal year of company ends: May 31.  
 General offices of the company are located at Chicago, Ill.



## GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$32,177,152 81
Total expenses, including taxes .....	\$21,226,924 80	
Net income .....		\$10,950,228 01
Interest on funded and unfunded debt.....	\$6,890,319 49	
Sinking funds .....	221,412 50	
Rentals of buildings, tracks, etc. ....	13,218 88	
Balance applicable to dividends .....		4,325,282 14
Dividends declared, 5 per cent on common, \$1,953,345.00; 7 per cent on preferred, \$1,564,412.50.....	\$3,517,757 50	
Balance for the year.....		\$907,524 64
Balance (profit and loss) last year.....		9,584,079 25
Items not included in above, as follows:		
Less written off May 31, 1896, transferred to "cost of road" on account of net income expended for construction purposes in previous years and not capitalized .....	6,492,313,25	
Balance forward to next year.....		\$3,899,290 64

## ANALYSIS OF CAPITAL STOCK.

Par value of shares.....	\$100 00	
Number of shares issued.....	683,888	
Common stock outstanding (including stock of proprietary railroads ....	\$44,030,365 97	
Preferred stock outstanding .....	22,353,454 56	
Total amount outstanding including stock of proprietary railroads, as per books of the company.....		\$66,383,820 53
Paid in per mile of road owned by C. & N. W. Ry. and proprietary Co.'s, 4,970.76 miles....		\$12,354 86

## MICHIGAN RAILROAD RETURNS, 1896.

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Name of bond.	Issued.	Due.	Interest.		Amount.
			Rate.	Payable.	
Maple River R. R. ....	July 1, 1887.	July 1, 1897.	7%	Jan. 1 and July 1...	\$402,800
Chic. & Mil. R'y, 1st .....	July 1, 1884	July 1, 1898.	7%	Jan. 1 and July 1...	1,700,000
Peninsula R. R. ....	July 1, 1863.	Sept. 1, 1898	7%	Mar. 1 and Sept. 1...	98,000
Iowa Midland R'y. ....	Aug. 1, 1870.	Oct. 1, 1900.	8%	Apr. 1 and Oct. 1...	1,850,000
Escanaba & L. Sup. R'y .....	July 1, 1881.	July 1, 1901.	6%	Jan. 1 and July 1...	720,000
Iowa Division, 1st mort. ....	April 1, 1891	Apr. 1, 1902.	4½%	Apr. 1 and Oct. 1...	1,411,000
General Consol. gold .....	Nov. 30, 1872	Dec. 1, 1902.	7%	June 1 and Dec. 1...	12,388,000
Milw. & Madison R'y .....	Sept. 1, 1890.	Sept. 1, 1905.	6%	Mar. 1 and Sept. 1...	1,600,000
Chicago & Tomah. ....	Sept. 1, 1890.	Nov. 1, 1905.	6%	May 1 and Nov. 1...	1,528,000
Chic. Mil. & No. West'n R'y .....	May 1, 1882.	Nov. 1, 1905.	6%	May 1 and Nov. 1...	750,000
Menominee River R. R., 1st. ....	July 1, 1876.	July 1, 1906	7%	Jan. 1 and July 1...	400,000
Menominee River R. R. Ext., 1st. ....	Jan. 1, 1890.	July 1, 1906.	7%	Jan. 1 and Dec. 1...	180,000
Des Moines & Minn. R. R. ....	Feb. 1, 1882.	Feb. 1, 1907.	7%	Feb. 1 and Aug. 1...	600,000
M. L. S. & W. R'y, Deb. of 1907 .....	Feb. 1, 1887.	Feb. 1, 1907.	5%	Feb. 1 and Aug. 1...	438,000
Dakota Cent. Ry. (W. & St. P. Con.) ..	May 1, 1882.	Sept. 1, 1907.	6%	Mar. 1 and Sept. 1...	1,088,000
Dakota Cent. R'y (So. Ea. Div.) .....	Nov. 1, 1882.	Nov. 1, 1907.	6%	May 1 and Nov. 1...	2,000,000
W. & St. P. R. E., 2d .....	Nov. 1, 1867	Nov. 1, 1907.	7%	May 1 and Nov. 1...	1,392,000
Roeh. & No. Minn. R'y .....	Sept. 1, 1878	Sept. 1, 1908	7%	Mar. 1 and Sept. 1...	200,000
Plainview R. R. ....	Sept. 1, 1878.	Sept. 1, 1908	7%	Mar. 1 and Sept. 1...	100,000
Minn. Valley R'y .....	Oct. 1, 1878.	Oct. 1, 1908.	7%	Apr. 1 and Oct. 1...	150,000
Ott. C. F. & St. P. R'y .....	Mar. 1, 1884.	Mar. 1, 1909	5%	Mar. 1 and Sept. 1...	1,600,000
C. E. & M. E. 7½ of 1884 .....	June 1, 1884	July 1, 1909.	7%	June 1 and Dec. 1...	789,000
Debentures of 1909 .....	July 1, 1884.	Nov. 1, 1909.	5%	May 1 and Nov. 1...	6,000,000
Nor. Illinois R'y .....	Apr. 1, 1885.	Mar. 1, 1910.	5%	Mar. 1 and Sept. 1...	1,500,000
Madison Extension .....	Apr. 1, 1871	Apr. 1, 1911.	7%	Apr. 1, and Oct. 1...	3,150,000
M. L. S. & W. Ry., income bonds .....	May 2, 1881.	May 1, 1911.	6%	May 1 and Nov. 1...	800,000
Menominee extension .....	June 1, 1871.	June 1, 1911.	7%	June 1 and Dec. 1...	2,697,000
Consol. S'l'g fund .....	Jan. 16, 1865	Feb. 1, 1915.	7%	{ Feb. 1 and May 1 } { Aug. 1 and Nov. 1 }	12,804,000
C. R. & M. R., 3d Div. ....	May 1, 1866.	May 1, 1916.	7%	May 1 and Nov. 1...	2,832,000
W. & St. P. R. R., Ext., gold .....	Dec. 1, 1871.	Dec. 1, 1916.	7%	June 1 and Dec. 1...	4,241,000
Northwestern Union R'y .....	June 1, 1872.	June 1, 1917.	7%	Mar. 1 and Sept. 1...	3,500,000
Debentures of 1921 .....	Feb. 28, 1891	Apr. 15, 1921	5%	Apr. 15 and Oct. 15.	10,000,000
M. L. S. & W. R'y, Consol., 1st .....	May 2, 1881.	May 1, 1921.	6%	May 1 and Nov. 1...	5,000,000
M. L. S. & W. R'y, Marshfield Ext. ....	Oct. 1, 1892.	Oct. 1, 1922.	5%	Apr. 1 and Oct. 1...	400,000
M. L. S. & W. R'y, Mich. Div., 1st .....	June 20, 1884	July 1, 1924.	6%	Jan. 1 and July 1...	1,281,000
M. L. S. & W., Ashland Div. ....	Mar. 2, 1885.	Mar. 1, 1925.	6%	Mar. 1 and Sept. 1...	1,000,000
C. & N. W. R'y, Ext. of 1886 .....	Apr. 15, 1886.	Aug. 15, 1926	4%	Feb. 15 and Aug. 15...	18,632,000
M. L. S. & W. R'y, Ext. & Imp. M't'g ..	Feb. 1, 1889.	Feb. 1, 1929.	5%	Feb. 1 and Aug. 1...	4,188,000
Consol., S. F. of 1879 .....	Oct. 1, 1879.	Oct. 1, 1929.	6%	Apr. 1 and Oct. 1...	6,187,000
Consol., S. F. of 1879 .....	Oct. 1, 1879.	Oct. 1, 1929.	5%	Apr. 1 and Oct. 1...	7,381,000
S. F. Debentures of 1883 .....	May 1, 1883.	May 1, 1933.	5%	May 1 and Nov. 1...	9,800,000
Wis. Northern R'y, 1st mort. ....	July 15, 1896	July 15, 1931	4%	Jan. 15 and July 15.	300,000
Total .....					\$181,808,500

Payable at New York.

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For current balances .....	Will probably be paid in cash .....	\$5,336,470 22

## RECAPITULATION.

Total funded debt.....	\$131,808,500 00
Total unfunded debt.....	5,386,470 22
Total debt liabilities.....	\$137,194,970 22
Amount of debt liabilities per mile of road, funded, 4,970.76 miles, \$26,516.77; unfunded, 5,030.78 miles, \$1,070.70.....	27,587 47
Total amount of stock and debt.....	208,578,790 75
Stock and debt per mile of road, stock and funded debt, 4,970.76 miles, \$39,871.63; unfunded debt, 5,030.78 miles, \$1,070.70.....	40,942 33

## GENERAL BALANCE SHEET.—Dr.

Construction account.....	\$174,808,916 91
Equipment account.....	
Other investments (specifying same):	
Bonds of other companies owned.....	\$3,250 00
Company's bonds on hand.....	8,698,843 75
Land grant investments.....	44,167 09
Cost of stock of Mo. Val. & B. R'y & Bri. Co.....	37,000 00
Cost of stock of Sioux City Bridge Co.....	2,400 00
Cost of stock of Sioux City & Pacific R. R.....	49,384 00
Cost of stock of F. E. & M. V. R. R.....	1,981,500 00
Cost of stock of C., St. Paul, M. & D. R'y.....	10,000,000 00
Common and preferred stock in hands of treasurer.....	2,387,402 61
Bonds of F. E. & M. V. R. Co. deposited with trustee as collateral for C. & N. W. R'y, 4 per cent ext. bonds of 1896.....	13,235,000 00
	36,393,947 45
Cash items:	
Cash.....	\$3,576,132 89
Bills receivable.....	277,497 07
Due from agents.....	1,035,847 25
	3,889,477 21
Other assets:	
Materials and supplies.....	\$2,068,954 68
Sinking funds, trustees of.....	7,932,387 87
Debit balances from companies and individuals.....	741,496 23
	10,742,840 78
Total.....	\$225,835,182 35

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$66,333,320 53
Funded debt.....	131,808,500 00
Purchase account (bonds on hand from purchase of M., L. S. & W. R'y.).....	8,407,000 00
Sinking funds.....	7,932,387 87
Installments paid.....	\$5,639,738 70
Accretions.....	1,262,649 17
Unfunded debt:	
Interest unpaid.....	1,950,736 35
Dividends unpaid.....	1,376,984 75
Vouchers and accounts.....	2,068,799 12
	5,386,470 22
Other liabilities (list as follows):	
Land income account.....	2,005,174 01
Income account, Consolidation Coal Co.....	12,539 08
Profit and loss or income accounts.....	3,399,290 64
Total.....	\$225,835,182 35

## COST OF ROAD AND EQUIPMENT.

Total cost for construction and equipment of road and branches built and acquired by company including cost of proprietary lines embraced in this report.

Total expended for construction and equipment.....	\$174,808,916 91
Average cost per mile of road, not including sidings, 4,970.76 miles.....	35,167 44
Proportion of cost for Michigan.....	13,323,919 40
Miles owned by C. & N. W. R'y. and proprietary lines—whole line.....	4,970.76
Miles owned by C. & N. W. R'y. and proprietary lines—in Michigan.....	521.19

## MICHIGAN RAILROAD RETURNS, 1896.

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Lands, extensions and new sidings .....	\$1,155,290 18
Second track .....	832,534 18
New buildings and bridges .....	205,838 88
New fences and road crossings .....	5,363 76
Machinery and tools .....	9,067 22
New cars .....	315,045 32
Total .....	\$2,622,634 49
Total charges to property account as above .....	2,622,634 49
Amount credited to property accounts—being surplus, etc., used for construction and representing no avails or resources to the company was written off to credit of "cost of road" .....	11,788,329 88
Net reduction in property account .....	<u>9,165,695 39</u>

## ANALYSIS OF EARNINGS.—IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

Main line and branches:		
Local fares .....	\$212,740 84	
Through fares .....	308 27	
Total passenger fares .....	213,044 11	
Express .....	46,133 68	
Mails .....	45,108 56	
Total passenger department earnings .....		\$304,291 35
Per train mile .....	\$0 71.06	
Per mile of road .....	583 84	

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic .....	\$1,776,461 68	
Through traffic .....	1,651 47	
Total traffic .....	1,778,113 15	
Total freight department earnings .....		1,778,113 15
Per train mile .....	\$1 47.60	
Per mile of road .....	<u>3,411 64</u>	

## ANALYSIS OF EARNINGS.—ENTIRE LINES.

## PASSENGER EARNINGS.

	Local fares.	Through fares.	Total passenger fares.	Express and baggage.	Mails.	Total.	Per train mile.	Per mile of road.
<b>Main line and branches</b>			\$6,746,749 74	\$534,213 64	\$741,524 83	\$8,022,488 26		
<i>Leased or proprietary roads:</i>								
W. & St. P. R. R.			334,945 52	18,408 00	51,232 77	404,587 29		
Dakota Central R'y.			134,465 22	12,759 86	84,994 82	232,219 90		
Princeton & Western R'y.			823 23		705 36	1,528 59		
St. Paul Eastern Grand Trunk R'y.			18,050 18	2,891 76	8,311 54	24,253 58		
<b>Total passenger department earnings</b>	\$6,704,345 72	\$550,409 16	\$7,255,000 88	\$568,277 76	\$831,709 57	\$8,705,082 21	\$0 87.44	\$1,730 86

## FREIGHT EARNINGS.

	Local traffic.	Through traffic.	Total traffic.	Total traffic.	Total.	Per train mile.	Per mile of road.
<b>Main line and branches</b>				\$21,065,463 53	\$21,065,463 52		
<i>Leased or proprietary roads:</i>							
W. & St. P. R. R.			1,564,454 16		1,564,454 16		
Dakota Central R'y.			468,071 43		468,071 42		
Princeton & Western R'y.			4,513 85		4,513 85		
St. Paul Eastern Grand Trunk R'y.			19,994 02		19,994 02		
<b>Total freight department earnings</b>	\$21,068,270 28	\$1,154,226 74	\$22,122,496 97	\$22,122,496 97	\$22,122,496 97	\$1 41.43	\$4,536 21

Total transportation earnings, entire line .....		\$31,827,579 18
Transportation earnings per mile of road .....	\$6,326 57	
Transportation earnings per train mile .....	1 20.99	
Miscellaneous receipts from operating account, other than for transportation, as follows:		
From rents of tracks, yards and terminals .....	\$29,023 52	
From rents not otherwise provided for .....	75,733 73	
From other sources .....	244,816 38	
Total .....		\$349,573 63

## Distribution of miscellaneous earnings between main line and leased or proprietary roads:

Company.	Total miscellaneous.	Actual for Michigan.
C. & N. W. R'y Co. ....	\$326,837 78	\$11,290 10
W. & St. P. R. R. Co. ....	13,114 19	
Dakota Central R'y .....	9,174 56	
Princeton & Western R'y .....	56 40	
St. Paul Eastern Grand Trunk R'y .....	390 70	
Total miscellaneous earnings .....	\$349,573 63	\$11,290 10
Total earnings from operation of road .....		\$32,177,152 81
Total earnings per mile of road (5,080.78 miles) .....	\$6,326 06	
Total earnings per train mile .....	1 22.38	
Amount of taxable earnings for Michigan, being actual earnings in Michigan .....		2,093,694 60
Total taxable earnings per mile of road in Michigan, 521.19 miles .....	4,017 14	
Receipts from investments included (as credits) in interest on funded and unfunded debt:		
Total income from all sources .....		\$32,177,152 81
Actual income for Michigan .....		2,093,694 60

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway .....	\$2,068,449 87
Renewals of rails .....	370,803 06
Renewals of ties .....	524,887 56
Repairs and renewals of bridges and culverts .....	511,805 37
Repairs and renewals of fences, road crossings, signs and cattle guards .....	174,439 00
Repairs and renewals of buildings and fixtures .....	438,485 73
Repairs and renewals of docks and wharves .....	173,687 20
Repairs and renewals of telegraph .....	32,432 28
Stationery and printing .....	14,890 65
Total .....	\$4,309,882 73

## MAINTENANCE OF EQUIPMENT.

Superintendence .....	\$243,265 27
Repairs and renewals of locomotives .....	1,032,882 79
Repairs and renewals of passenger cars .....	331,267 11
Repairs and renewals of freight cars .....	1,697,850 01
Repairs and renewals of work cars .....	34,068 36
Repairs and renewals of marine equipment .....	2,349 51
Repairs and renewals of shop machinery and tools .....	89,577 58
Stationery and printing .....	21,196 49
Other expenses .....	141,878 10
Total .....	\$3,598,550 22

## CONDUCTING TRANSPORTATION.

Superintendence.....	\$151,489 87
Engine and roundhouse men.....	2,480,349 10
Fuel for locomotives.....	2,005,653 88
Water supply for locomotives.....	187,120 36
Oil, tallow and waste for locomotives.....	72,344 81
Other supplies for locomotives.....	82,349 42
Train service.....	1,885,062 21
Train supplies and expenses.....	278,784 43
Switchmen, flagmen and watchmen.....	866,195 92
Telegraph expenses.....	405,524 87
Station service.....	1,543,843 67
Station supplies.....	131,926 80
Switching charges—balance.....	140,849 21
Car mileage—balance.....	309,021 59
Loss and damage.....	116,479 80
Injuries to persons.....	826,832 13
Clearing wrecks.....	12,649 76
Operating marine equipment.....	3,447 14
Advertising.....	62,992 64
Outside agencies.....	311,821 46
Commissions.....	61,285 09
Stockyards and elevators.....	76 49
Rents for tracks, yards and terminals.....	57,900 28
Rent of buildings and other property.....	118,157 55
Stationery and printing.....	
Total.....	\$11,496,658 88

## GENERAL EXPENSES.

Salaries of general officers.....	\$145,724 82
Salaries of clerks and attendants.....	296,553 88
General office expenses and supplies.....	84,105 28
Insurance.....	2,740 87
Law expenses.....	141,388 95
Stationery and printing (general offices).....	11,841 28
Other expenses.....	1,805 56
Taxes.....	1,142,422 39
Total.....	\$1,826,532 98

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	20.80	\$4,309,882 72
Maintenance of equipment.....	16.63	3,583,850 22
Conducting transportation.....	54.16	11,496,658 88
General expenses, including taxes.....	8.61	1,826,532 98
Total operating expenses and taxes.....	100.00	\$21,226,924 80
Operating expenses and taxes per mile of road.....		\$4,219 41
Operating expenses and taxes per train mile run, for trains, earning revenue, 26,304,524 miles.....		0 80.697
Total proportion of expenses and taxes for Michigan.....		2,199,114 44
Percentage of expenses and taxes to earnings.....		65.97
Net earnings per mile of road.....		2,176 66
Net earnings per train mile.....		41.63

## MICHIGAN RAILROAD RETURNS, 1896.

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini: (In Michigan.)

Termini.	When built.	Miles.
Escanaba to Negaunee.....	In 1864.....	62.00
Negaunee to Junction beyond Ishpeming.....	In 1864.....	4.58
Marinette to Escanaba.....	In 1872.....	64.65
Powers to Quinnesec.....	In 1877.....	24.71
Quinnesec to Menominee River.....	In 1880.....	8.13
Second Crossing of Menominee River to Crystal Falls.....	In 1882.....	12.20
Iron River Junction to Stambaugh.....	In 1882.....	19.50
Narenta to Metropolitan.....	In 1882.....	34.86
Iron River to Watersmeet.....	In 1887.....	35.16
Junction near Ishpeming to Republic.....	In 1888.....	21.96
Clowry to Michigamme.....	In 1888.....	10.44
Wabic to Champion.....	In 1888.....	1.23
Branches to mines off main line.....	At various dates.....	42.27
Branches to mines off Menominee River R. R. Line.....	At various dates.....	31.42
Branches to mines off Escanaba and Lake Superior Line.....	At various dates.....	8.44
Branches to mines, Crystal Falls to Hemlock mine.....	In 1891.....	15.00
Branches to mines off Ashland division.....	At various dates.....	29.33
Branches to industries off Ashland division.....	At various dates.....	.52
State line to Gogebic.....	In 1888.....	26.10
Gogebic to Montreal River.....	In 1884.....	40.79
Watersmeet to Choate.....	In 1891.....	22.82
Interior Junction to Interior.....	In 1889.....	1.61
Craigsmere to Robbins.....	In 1892.....	3.47
Total.....		521.19



## CHICAGO &amp; NORTHWESTERN RAILWAY COMPANY.

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## MAIN LINE OR CONSOLIDATED ROAD.

Road belonging to Chicago &amp; Northwestern Railway Company.

Lines chartered as or consolidated with Chicago & Northwestern R'y Co.	Total	Illinois.	Iowa.	Wisconsin.	Michigan.	Minnesota.	South Dakota.	North Dakota.
Chicago to Council Bluffs.....	491 00	137 88	353 12					
Chicago to Freeport.....	121 00	121 00						
Geneva to Aurora.....	9 40	9 40						
Geneva to St. Charles.....	2 40	2 40						
Sycamore to Cortland.....	4 64	4 64						
Elgin to Williams Bay.....	51 04	35 82		15 22				
Belvidera to Spring Valley.....	75 78	75 78						
South Bra. Junct. to River (Chicago).....	4 50	4 50						
Clinton to Anamosa (Quarry).....	73 57		73 57					
Stanwood to Tipton.....	8 50		8 50					
Cut-off near Cedar Rapids.....	5 96		5 96					
Des Moines to Jewell Junction.....	59 09		59 09					
Tama to Elmore.....	164 56		164 22			34		
Jewell Junction to Wall Lake Junction.....	73 68		73 68					
Eagle Grove to Hawarden.....	145 20		145 20					
Belle Plaine to Muchakinock.....	64 00		64 00					
Boone to Coal Banks.....	3 25		3 25					
Maple River Junction to Onawa.....	80 85		80 85					
Wall Lake to Merville.....	79 87		79 87					
Carroll to Kirkman.....	34 81		34 81					
Manning to Audubon.....	17 00		17 00					
Chicago to Ft. Howard.....	242 20	69 73		172 47				
Appleton Water Power Extension.....	3 63			3 63				
Kenosha to Rockford.....	72 10	44 03		28 07				
Chicago to Montrose.....	5 20	5 20						
Montrose to North Evanston.....	7 69	7 69						
Chicago to Milwaukee.....	85 00	44 60		40 40				
Milwaukee to Fond du Lac.....	62 63			62 63				
Sheboygan to Princeton.....	78 40			78 40				
Milwaukee to Montfort.....	140 88			140 88				
Montfort to Galeana.....	46 34	10 80		36 04				
Montfort to Woodman.....	30 50			30 50				
Ipswich to Platteville.....	4 00			4 00				
Lancaster Junction to Lancaster.....	1 04			12 01				
Janesville to Alton.....	6 10			6 10				
Belvidera to Winona.....	227 00	21 00		205 87		13		
Winona Junction to La Crosse.....	3 96			3 96				
Trempealeau to Galesville.....	6 71			6 71				
Evansville to Janesville.....	15 68			15 68				
Ft. Howard to Republic.....	102 64			49 45	153 19			
Clowry to Michigamme.....	10 44				10 44			
Wabuc to Champion.....	1 23				1 23			
Powers to Watersmeet.....	104 33			13 73	90 60			
Stager to Crystal Falls.....	9 10				9 10			
Naranta to Metropolitan.....	34 86				34 86			
Branches to mines.....								
Off main line.....	42 27				42 27			
Off Escanaba & Lake Superior line.....	8 44				8 44			
Off Menominee River line.....	36 13			4 71	31 42			
Off Crystal Falls to Hemlock mine.....	15 00				15 00			
Off Ashland division.....	34 22			4 89	29 33			
Branches to industries off Ashland div.....	21 44			20 92	52			
Lake Shore Junct. to Ashland, Wis.....	385 13			318 24	66 89			
Monico Junction to Hurley, Wis.....	88 11			88 11				
Two Rivers Junct. to Two Rivers, Wis.....	6 35			6 35				
Hortonsville to Oshkosh, Wis.....	23 10			23 10				
Elau Junction to Marshfield, Wis.....	63 87			63 87				
North of Antigo to E. Bryant Switch.....	7 27			7 27				
Pratt Junction to Harrison.....	17 85			17 85				
Parrish Junction to Parrish.....	4 54			4 54				
Watersmeet to Choate.....	22 82				22 82			
Interior Junction to Interior.....	1 61				1 61			
Crazeville to Robbins.....	3 47				3 47			
Hurley to end of track.....	12 97			12 97				
Potato River Junct. to end of track.....	2 60			2 60				
Extension through Sec 34.....	1 34			1 34				
Total C. & N. W. R'y (chartered or consolidated).....	3,782 28	593 97	1,163 12	1,563 54	521 19	47		

Total length of road belonging to this company .....	3,782.29
Total length of road belonging to this company, in Michigan .....	521.19
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated .....	174.54
Aggregate length of tracks in Michigan belonging to this company, computed as single track .....	695.73

Gauge of track, 4 feet 8½ inches—3,766.29 miles.  
 " " 3 feet—16.00 miles.

*Proprietary or leased roads operated by this company.*

Name, description and length of each:

Proprietary lines, viz:	Total.	Illinois.	Iowa.	Wisconsin.	Michigan.	Minnesota.	South Dakota.	North Dakota.
Princeton & Western R'y.....	16.06							
Valley Junction to Necedah.....				16.06				
Winona & St. Peters R. R.....	448.48							
Winona to Watertown.....						288.50	34.48	
Mankato Junction to Mankato.....						3.75		
Sleepy Eye to Redwood Falls.....						24.40		
Rochester to Zumbrota.....						24.48		
Eyota to Plainview.....						15.01		
Eyota to Chatfield.....						11.46		
Tracy to Dakota line.....						46.40		
Dakota Central R'y.....	723.98							
Minnesota State Line to Pierre.....							209.11	
James Valley Junction to Oakes.....							117.87	14.28
Watertown Junction to Watertown.....							43.88	
Watertown to Gettysburg.....							146.25	
Iroquois to Hawarden (State line).....							125.49	
Centerville to Yankton.....							28.46	
Doland to Groton.....							38.84	
Total.....	1,188.47			16.06		414.00	744.13	14.28
<i>Leased lines, viz.:</i>								
St. Paul Eastern Grand Trunk R'y.....	60.02							
Clintonville to Oconto.....				56.00				
Spurs.....				4.02				
Total.....	60.02			60.02				
<i>Recapitulation.</i>								
C. & N. W. R'y (chartered or consolidated).....	3,782.29	593.97	1,163.12	1,508.54	521.19	.47		
Proprietary lines.....	1,188.47			16.06		414.00	744.13	14.28
Leased lines.....	60.02			60.02				
Grand total.....	5,080.78	593.97	1,163.12	1,579.62	521.19	414.47	744.13	14.28

*Number of bridges and trestles in Michigan.*

	Aggregate	
	Number.	Length, feet.
Wooden bridges.....	38	2,690
Stone bridges.....	2	60
Iron bridges.....	11	1,807
Combination bridges.....	4	701
Wooden trestles.....	303	27,089
Total.....	358	32,347

*Crossings.—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?

Chicago, Milwaukee & St. Paul R'y at Balsam.  
 Chicago, Milwaukee & St. Paul R'y at Menominee (3 crossings.)  
 Chicago, Milwaukee & St. Paul R'y at Antoine.  
 Chicago, Milwaukee & St. Paul R'y at Wabic.  
 Minneapolis, St. Paul & Sault Ste. Marie R. R. at Hermansville.  
 Minneapolis, St. Paul & Sault Ste. Marie R. R. near Narenta (2 crossings.)  
 Duluth, South Shore & Atlantic R. R. at Negaunee.  
 Duluth, South Shore & Atlantic R. R. near L. Angeline.  
 Duluth, South Shore & Atlantic R. R. at Michigamme.  
 Duluth, South Shore & Atlantic R. R. at Diorite.  
 Duluth, South Shore & Atlantic R. R. at Dishno.  
 Duluth, South Shore & Atlantic R. R. near Republic.  
 Huron Bay & Iron Range R. R. at Dishno.  
 Wisconsin Central R. R. spur, Palmes mine spur at Anvil mine.  
 Wisconsin Central R. R. at Benjamin mine spur at Colby mine.  
 Duluth, South Shore & Atlantic R. R. at Jack Pot Mine spur at Imperial mine.  
 Lake Superior & Ishpeming R. R. at Negaunee.

What railroads cross your road either over or under your grade in this State, and where?

Over:

Duluth, South Shore & Atlantic R. R. at Negaunee (2 crossings).  
 Duluth, South Shore & Atlantic R. R. at 8-10 miles west of Bessemer.  
 Chicago, Milwaukee & St. Paul R. R. at Antoine.  
 Wisconsin Central R. R. at 8-10 miles east of Siemens.  
 Wisconsin Central R. R. at Ironwood.  
 Lake Superior & Ishpeming R. R. at Negaunee (2 crossings).

Under:

Duluth, South Shore & Atlantic R. R. near Wabic.  
 Minneapolis, St. Paul & Sault Ste. Marie R. R. at Flat Rock.

At what crossings are interlocking and derailling switches in operation?

At Duluth, South Shore & Atlantic crossing, one mile east of Michigamme.  
 At Chicago, Milwaukee & St. Paul crossing at Wabic.  
 At Chicago, Milwaukee & St. Paul Republic branch crossing two miles east of Republic.  
 At Minneapolis, St. Paul & Sault Ste. Marie R'y near Narenta.

What pattern or patterns have you adopted?

Union Switch & Signal interlocking switches.

Number of crossings of highways at grade in this State.....	205
Number of crossings of highways at grade in this State at which there are gates or flagmen.....	19
Number of crossings at which there are electric or automatic signals.....	6

What pattern or patterns in use?

Mills' improved air gate with double lock posts.

Number of crossings of highway over or under railroad: over 2, under 7 .....	9
Number of highway bridges 18 feet above track.....	2

Have safety guards been erected at overhead obstructions?

Yes.

Are your frogs and guard rails blocked as required by act 174, session laws 1883?

Yes.

How are they treated?

Wooden or iron blocking.

*Stations.*

Number of stations on whole lines at which there are buildings and agents.....	748
Same in Michigan at which there are buildings and agents.....	46

*Employés.*

Number of persons regularly employed on all roads operated by company, including officials.....	20,745
Same in Michigan.....	1,389

Classify your employés as per following list:

	Number.
Baggagemen .....	408
Brakemen .....	1,474
Conductors .....	799
Engineers .....	1,177
Firemen .....	1,305
Laborers .....	5,088
Shopmen .....	4,368
Yardmen .....	785
Others .....	5,398

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you?.....	881.74
Give the number of miles required to complete fence both sides of your track in Michigan and the counties in which needed:	
Iron.....	48.50
Menominee.....	38.62
Delta.....	23.78
Marquette.....	43.60
Gogebic.....	154.20
Ontonagon.....	46.94
Total miles required.....	860.84

*Road bed and track.*

Number of track sections in Michigan.....	85
Average lengths of sections, miles.....	6.13
Average number of men in each section gang.....	4.5
Number of new ties put in whole line during the year.....	1,556,597
Number of new ties put in track in Michigan.....	221,678
Average number of new ties per mile of road.....	309
New rails put in track:	
Steel, tons, 19,242.1633, miles.....	313.32
Total miles of track laid with new rails.....	156.91

*Bridges and culverts.*

Amount of trestle work replaced with earth during the year, linear feet.....	517
Timber culverts replaced during the year:	
With iron pipe—number.....	2
With sewer pipe—number.....	1
With timber—number.....	28
New bridges built during the year—number.....	37

Location.	Kind.	Material.	Month built.	Feet in length.
Wellington.....	Pile.....	Wood.....	July.....	60
Wellington.....	Pile.....	Wood.....	October.....	60
Foster City.....	Pile trestle.....	Wood.....	January.....	192
Crystal Falls.....	Timber trestle.....	Wood.....	January.....	400
Norway.....	Timber trestle.....	Wood.....	March.....	32
Waukegan.....	Pile trestle.....	Wood.....	June.....	80
Menominee.....	Pile trestle.....	Wood.....	June.....	32
Menominee.....	Pile trestle.....	Wood.....	July.....	32
Carbondale.....	Pile trestle.....	Wood.....	July.....	48
Brampton.....	Pile trestle.....	Wood.....	July.....	144
Spruce.....	Pile trestle.....	Wood.....	July.....	48
Spruce.....	Pile trestle.....	Wood.....	July.....	48
Metropolitan.....	Pile trestle.....	Wood.....	July.....	64
Iron River.....	Pile trestle.....	Wood.....	July.....	64
Negaunee.....	Timber trestle.....	Wood.....	July.....	44
Wallace.....	Pile trestle.....	Wood.....	August.....	32
Ingalls.....	Pile trestle.....	Wood.....	August.....	48
Talbot.....	Pile trestle.....	Wood.....	August.....	29
Carney.....	Pile trestle.....	Wood.....	August.....	60
Alecto.....	Pile trestle.....	Wood.....	August.....	60
Whitney.....	Pile trestle.....	Wood.....	August.....	48
Helps.....	Pile trestle.....	Wood.....	August.....	32
Helps.....	Pile trestle.....	Wood.....	August.....	80
Spruce.....	Pile trestle.....	Wood.....	August.....	64
Stephenson.....	Pile trestle.....	Wood.....	September.....	32
Alecto.....	Pile trestle.....	Wood.....	September.....	48
Alecto.....	Timber trestle.....	Wood.....	September.....	80
Alecto.....	Pile trestle.....	Wood.....	September.....	32
Alecto.....	Pile trestle.....	Wood.....	September.....	48
Faunus.....	Pile trestle.....	Wood.....	September.....	80
Helps.....	Pile trestle.....	Wood.....	October.....	80
Hylas.....	Pile trestle.....	Wood.....	October.....	48
Norway.....	Pile trestle.....	Wood.....	October.....	48
Brook Creek.....	Pile trestle.....	Wood.....	November.....	304
Norway.....	Pile trestle.....	Wood.....	November.....	48
Norway.....	Pile trestle.....	Wood.....	November.....	48
Menominee.....	Pile trestle.....	Wood.....	December.....	96

NOTE.—Wooden trestle approaches to truss and other large span bridges are counted as one structure and are included in the total number of trestles.

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons' weight, exclusive of tender.....	948	
Number of locomotives of 20 to 30 tons' weight, exclusive of tender.....	60	
Number of locomotives of 10 to 20 tons' weight, exclusive of tender.....	2	
<b>Total.....</b>		<b>1,010 \$4,646,000 00</b>
Number of passenger cars—12-wheel, including parlor, buffet and official cars.....	219	573,800 00
Number of passenger cars—8-wheel, including chair and official cars.....	361	883,800 00
Number of express and baggage cars.....	150	150,000 00
Number of box freight cars.....	20,269	6,060,700 00
Number of stock cars.....	2,881	864,300 00
Number of platform and coal cars.....	6,865	1,792,700 00
Number of ore cars.....	4,351	662,650 00
Number of conductors' way cars.....	546	327,800 00
<b>Other cars as follows:</b>		
Dining.....	9	
Milk.....	41	
Mail.....	35	
Combination.....	79	
Boarding (for men).....	26	
Excavator, pile driving and wrecking.....	46	
Rotary steam plows.....	3	
	239	311,500 00
<b>Total.....</b>		<b>35,911 \$11,636,650 00</b>
<b>Grand total.....</b>		<b>\$16,282,650 00</b>

Number of locomotives equipped with power brakes.....	968
Number of passenger-train cars equipped with power brakes.....	894
Number of freight cars equipped with power brakes.....	24,195
What patterns of power brakes have you in use, and number of locomotives and cars with each?	
Number of locomotives equipped with Westinghouse automatic air brakes.....	32
Number of locomotives equipped with Westinghouse automatic air and driver brakes.....	863
Number of locomotives equipped with American steam brakes.....	36
Number of locomotives equipped with American steam driver and Westinghouse automatic air brakes.....	67
Number of passenger cars equipped with Westinghouse air brakes.....	968
Number of freight cars equipped with Westinghouse air brakes.....	24,195

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?

Yes.

What pattern or patterns have you adopted for use?  
Janney coupler; Chicago automatic steel coupler.

How are your passenger cars heated.  
Stoves, Baker hot water heaters and steam.

## MILEAGE TRAFFIC, ETC.

*Train mileage.*

	Entire lines.	In Michigan.
Miles run by passenger trains during the year.....	9,731,602	404,634
Miles run by freight trains during the year.....	15,632,502	1,134,935
Miles run by mixed trains.....	899,420	94,240
<b>Total mileage of trains earning revenue.....</b>	<b>26,304,524</b>	<b>1,632,832</b>

*Passenger traffic.—Entire lines.*

	Numbers.	Miles.	Rate.
Number of through passengers carried, earning revenue.....	118,745		
Number of local passengers carried, earning revenue.....	14,232,239		
<b>Total number of passengers carried, earning revenue.....</b>	<b>14,395,984</b>		
Number of passengers carried one mile.....	351,218,583		
Average distance carried.....		24.399	
Average amount received from each passenger.....			\$0 50.396
Average receipts per mile for through passengers.....			02.199
Average receipts per mile for local passengers.....			02.055
Average receipts per passenger per mile for all passengers.....			02.065

## MICHIGAN RAILROAD RETURNS, 1896.

*Passenger traffic.—In State of Michigan.*

Number of through passengers carried, earning revenue.....	1,010		
Number of local passengers carried earning revenue.....	278,098		
Total number of passengers carried, earning revenue.....	279,108		
Number of passengers carried one mile.....	7,288,305		
Average distance carried.....		26.113	
Average amount received from each passenger.....			\$0 76.331
Average receipts per mile for through passengers.....			02.705
Average receipts per mile for local passengers.....			02.923
Average receipts per passenger per mile for all passengers.....			02.923

*Freight traffic.—Entire lines.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue....	380,104		
Number of tons of local freight carried, earning revenue.....	15,392,538		
Total tons of freight carried, earning revenue.....	15,772,642		
Total mileage of through freight.....		140,524,012	
Total mileage of local freight.....		2,190,768,692	
Total freight mileage or tons carried one mile.....		2,331,292,704	
Average ton haul for through freight.....		370	
Average ton haul for local freight.....		142	
Average ton haul for all freight.....		148	
Average amount received for each ton haul.....			\$1 47
Average receipts ton per mile for through freight.....			00.82
Average receipts ton per mile for local freight.....			01.00
Average receipts ton per mile for all freight.....			00.99

*Freight traffic.—In State of Michigan.*

Number of tons of through freight carried, earning revenue....	4,923		
Number of tons of local freight carried, earning revenue.....	4,174,536		
Total tons of freight carried, earning revenue.....	4,179,459		
Total mileage of through freight.....		141,086	
Total mileage of local freight.....		204,300,685	
Total freight mileage or tons carried one mile.....		204,441,751	
Average ton haul for through freight.....		29	
Average ton haul for local freight.....		49	
Average ton haul for all freight.....		49	
Average amount received for each ton haul.....			\$0 42.54
Average receipts ton per mile, for through freight.....			01.17
Average receipts ton per mile, for local freight.....			00.87
Average receipts ton per mile, for all freight.....			00.87

## FREIGHT TRAFFIC MOVEMENT.—ENTIRE LINES.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	1,505,493	502,536	2,008,031	12.78
Flour.....	96,962	189,968	285,950	1.81
Other mill products.....	62,141	76,925	139,066	.88
Hay.....	88,219	114,583	202,802	1.29
Tobacco.....	6,740	1,125	7,865	.05
Cotton.....	452	447	899	.01
Fruit and vegetables.....	166,604	75,983	242,537	1.54
Potatoes.....	7,731	1,717	9,448	.06
<b>Products of animals:</b>				
Live stock.....	452,509	238,496	691,005	4.38
Dressed meats.....	51,091	11,300	62,391	.40
Other packing house products.....	132,638	53,331	186,469	1.18
Poultry, game and fish.....	12,672	7,532	20,204	.13
Wool.....	4,775	5,635	10,410	.07
Hides and leather.....	32,864	8,253	41,122	.26
<b>Products of mines:</b>				
Anthracite coal.....	490,263	52,764	543,027	3.44
Bituminous coal.....	1,211,768	234,197	1,445,965	9.17
Coke.....	110,337	873	111,230	.70
Ores.....	3,515,626	2,822	3,518,448	22.31
Stone, sand and other like articles.....	493,192	36,181	529,373	3.36
Salt.....	60,233	1,866	62,098	.39
<b>Products of forest:</b>				
Lumber.....	810,582	215,095	1,025,677	6.50
Logs.....	20,047	—	20,047	.13
Shingles.....	1,110	285	1,395	.01
Other forest products.....	789,934	36,020	825,954	5.24
<b>Manufactures:</b>				
Petroleum and other oils.....	174,443	4,162	178,605	1.13
Sugar.....	31,892	6,192	38,084	.24
Naval stores.....	394	—	394	—
Iron, pig and bloom.....	175,569	16,988	192,557	1.22
Iron and steel rails.....	38,249	186	38,435	.24
Other castings and machinery.....	103,178	8,639	111,817	.71
Bar and sheet metal.....	215,331	13,475	228,806	1.45
Cement, brick, and lime.....	259,329	29,922	289,451	1.83
Agricultural implements.....	78,220	12,335	90,555	.57
Wagons, carriages, tools, etc.....	110,785	15,308	126,093	.80
Wines, liquors and beers.....	210,224	5,117	215,341	1.37
Household goods and furniture.....	91,459	9,684	101,143	.64
<b>Merchandise.....</b>	<b>861,523</b>	<b>182,502</b>	<b>1,044,025</b>	<b>6.63</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	1,070,577	55,346	1,125,923	7.14
<b>Total tonnage.....</b>	<b>13,544,398</b>	<b>2,228,244</b>	<b>15,772,642</b>	<b>100.</b>

## FREIGHT TRAFFIC MOVEMENT.—IN STATE OF MICHIGAN. .

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	349	946	1,295	.03
Flour.....	1,092	1,559	2,651	.07
Other mill products.....	441	697	1,138	.03
Hay.....	1,614	5,594	7,208	.18
Tobacco.....	2	2	2	
Fruit and vegetables.....	1,533	224	1,757	.04
Potatoes.....	117	84	201	.01
<b>Products of animals:</b>				
Live stock.....	762	237	999	.03
Dressed meats.....	166	345	511	.01
Other packing house products.....	194	112	306	.01
Poultry, game and fish.....	198	4	202	.01
Hides and leather.....	126		126	
<b>Products of mines:</b>				
Anthracite coal.....	7,005	2,695	9,700	.24
Bituminous coal.....	42,153	259	42,412	1.05
Ores.....	3,402,619		3,402,619	84.80
Stone, sand, and other like articles.....	3,155	1,416	4,571	.11
Salt.....	94		94	
<b>Products of forest:</b>				
Lumber.....	133,699	6,506	140,205	3.49
Logs.....	10,571		10,571	.26
Shingles.....	308	15	323	.01
Other forest products.....	357,545	346	357,891	8.90
<b>Manufactures:</b>				
Petroleum and other oils.....	871	12	883	.02
Sugar.....		17	17	
Iron, pig and bloom.....	3,520	15	3,535	.09
Iron and steel rails.....	1		1	
Other castings and machinery.....	1,207	183	1,390	.03
Bar and sheet metals.....	133	18	151	
Cement, brick and lime.....	824	783	1,557	.04
Agricultural implements.....	16	3	19	
Wagons, carriages, tools, etc.....	43	33	76	
Wines, liquors and beers.....	1,830	62	1,892	.05
Household goods and furniture.....	1,893	95	1,988	.05
<b>Merchandise</b> .....	10,977	1,016	11,993	.30
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	12,208	1,342	13,550	.34
<b>Total tonnage</b> .....	3,997,266	24,596	4,021,864	100.00



## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Co.

By an agreement with American Express Company of date April 16, 1894, to be in force until the first day of April, 1899. The C. & N. W. R'y Co. agrees to transport the freight of the express company over all lines operated by the railway company, aggregating 5,000 miles, for an annual payment of \$550,059.98 (with provision for an extra payment for facilities on special trains), for an estimated limited tonnage, and an agreed schedule of rates for exceptional excess of tonnage.

The express company does a miscellaneous business properly belonging to express business. They deliver their freight into this company's cars.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

The entire length of road is afforded telegraph facilities by the lines of the Western Union Telegraph Company in which this company owns certain wires, or rights of their use.

*Transportation companies.*

## SLEEPING, DRAWING ROOM AND PALACE CAR COMPANIES.

What sleeping, drawing room, chair or other palace passenger cars, not the exclusive property of your own or some other railroad company, have, during the year, been in use on your road in the State of Michigan, and on what terms? If rented by you, or allowed mileage between local points in this State, what was the amount paid for the use of such cars during the period under report?

Sleeping cars owned by Wagner Palace Car Co. have been in use on portions of this company's road in Michigan. The car company maintains the cars, and fixes and collects the charges from passengers for accommodations in same.

For the use of the cars the C. & N. W. R'y Co. pays a mileage.

This company has paid the Wagner Palace Car Co. of New York for mileage of their cars in Michigan during the year, \$2,321.49.

*Fast freight lines.*

To what fast freight lines, or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

This company has no cars of other companies or lines in use exclusively for traffic between local points in the State of Michigan.

Cars of other companies coming into the State with inter-state freight may do some business between local points, but the mileage applicable to such limited traffic cannot be separated.

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

## KILLED.

May 19, John Dadusic, Ironwood. Fell from car. Want of caution.

June 7, M. Murek, Powers. Walking on track, struck. Carelessness.

June 19, unknown man, Vulcan. Walking on track, struck. Carelessness.

June 22, G. Madsen, Escanaba. Walking on track, struck. Carelessness.

July 7, R. Snow, car repairer, Escanaba. Working under train which moved. Want of caution.

July 8, John Stonehouse, engineer, Trombly. Engine exploded. Accidental.

July 19, M. M. Michaels, Marenisco. Crossing track, struck. Want of caution.

July 20, P. Johnson, Kroman. Walking on track, struck. Carelessness.

July 26, P. Manning, Powers. Getting on moving train.

## INJURED.

January 14, E. Hendricks, fireman, Antoine. Fell from engine tank; want of caution.

January 21, N. DeBeek, conductor, Menominee. Derailment; accidental.

February 10, M. Jagers, switchman, Iron Mountain. Coupling cars; want of caution.

March 5, S. J. Kerr, switchman, Ironwood. Hand on brake wheel which flew; want of caution.

April 2, J. DeLoria, brakeman, Beaver Siding. Jumped from train and fell; want of caution.

June 1, F. Rath, switchman, Iron Mountain. Fell from engine; want of caution.

June 18, Flora McKinnon, Metropolitan. Ran in front of train; ran over; carelessness.

July 4, P. Barchiera, Negaunee. Walking on track, struck; carelessness.

July 7, H. Godette, car repairer, Escanaba. Working under train, which moved; want of caution.

July 7, P. Bilgren, car repairer, Escanaba. Working under train, which moved; want of caution.

July 8, F. C. Buell, fireman, Trombly. Engine exploded; accidental.

July 8, W. E. Rogers, conductor, Trombly. Engine exploded; accidental.

July 8, G. Gorgens, brakeman, Trombly. Engine exploded; accidental.

August 24, M. H. King, Siding No. 5. Getting on moving train; fell; carelessness.

## MICHIGAN RAILROAD RETURNS, 1896.

August 25, E. Hall, engineer, Hazel Junction. Logs rolled off cars, striking engine; accidental.  
 August 26, T. G. Atkinson, Hazel Junction. Logs rolled off cars, striking engine; accidental.  
 August 26, E. Hickey, fireman, Hazel Junction. Logs rolled off cars, striking engine; accidental.  
 August 28, Jno. Burns, Stager. Walking on track, struck, carelessness.  
 September 28, Chas. Farrell, switchman, Iron Mountain. Uncoupling cars; want of caution.  
 October 15, J. Jerawsky, Ironwood. Crawling under cars; carelessness.  
 November 17, A. Sara, laborer, Mansfield Mine. Thrown down in car, by jar; accidental.  
 November 17, I. Johnson, laborer, Mansfield Mine. Thrown down in car, by jar; accidental.  
 November 17, A. Johnson, laborer, Mansfield Mine. Thrown down in car, by jar; accidental.  
 November 27, J. B. Aiken, brakeman, Atkinson. Coupling cars; lumber struck knee; want of caution.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Cause of accident.	Killed.			Injured.		
	Passengers.	Employees.	Others.	Passengers.	Employees.	Others.
Coupling cars.....					3	
Derailments.....					1	
Falling from trains.....		1			2	
Getting on and off trains.....	1			1	1	
Highway crossings.....			2			
Miscellaneous.....		2		1	11	
Trespassers on tracks.....			4			4
Total.....		8	6	2	18	4

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year ..... 9  
 Number of persons injured during the year..... 24  
 Number of casualties purely accidental..... 11  
 Number resulting from lack of caution, carelessness or misconduct..... 23  
 Trespassers and tramps killed or injured..... 8

## CLASSIFICATION OF EMPLOYÉS.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Brakemen.....		3	3
Conductors.....		2	2
Engineers.....	1	1	2
Firemen.....		3	3
Laborers.....		3	3
Shopmen.....	1	2	3
Yardmen.....		4	4
Total.....	2	18	20

STATE OF ILLINOIS, } ss.  
 COUNTY OF COOK,

M. Hughitt, president, and J. B. Redfield, auditor, of the Chicago and Northwestern Railway Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF M. H.]

Signed,

MARVIN HUGHITT,  
 J. B. REDFIELD.

Subscribed and sworn to before me this 19th day of February, A. D. 1897.

[L. S.]

J. F. CLEVELAND,  
 Notary Public.

ANNUAL REPORT  
OF THE  
CHICAGO & WEST MICHIGAN RAILWAY COMPANY,

*For the year ending December 31, 1896.*

[Filed April 14, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, NATHANIEL THAYER, Boston, Mass.  
*Vice President*, EUGENE V. R. THAYER, Boston, Mass.  
*Secretary*, CHARLES MERRIAM, Boston, Mass.  
*Auditor*, U. B. ROGERS, Grand Rapids, Mich.  
*Treasurer*, CHARLES MERRIAM, Boston, Mass.  
*General Manager*, CHARLES M. HEALD, Grand Rapids, Mich.  
*General Superintendent*, J. K. V. AGNEW, Grand Rapids, Mich.  
*Assistant Superintendent*, F. M. DRAKE, Grand Rapids, Mich.  
*General Auditor*, C. W. COURTRIGHT, Boston, Mass.  
*Chief Engineer*, J. J. McVEAN, Grand Rapids, Mich.  
*Superintendent of Telegraph*, F. H. CARR, Grand Rapids, Mich.  
*Assistant Treasurer*, JAMES E. HOWARD, Grand Rapids, Mich.  
*General Passenger Agent*, GEO. DeHAVEN, Grand Rapids, Mich.  
*General Freight Agent*, F. V. DAVIS, Grand Rapids, Mich.  
*Solicitor*, F. A. NIMS, Muskegon, Mich.

DIRECTORS.

NATHANIEL THAYER, Boston, Mass.  
CHARLES MERRIAM, Boston, Mass.  
A. H. HARDY, Boston, Mass.  
F. H. DAMON, Boston, Mass.  
E. V. R. THAYER, Boston, Mass.  
GEO. O. SHATTUCK, Boston, Mass.  
C. F. ADAMS, Boston, Mass.  
H. H. HUNNEWELL, Boston, Mass.  
CHAS. M. HEALD, Grand Rapids, Mich.

Terms expire, April 21, 1897.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: October 1, 1881.  
Number of stockholders at date of last election: 645.  
Number of stockholders in Michigan at same date: 6.  
Amount of full paid stock held in Michigan at same date: \$7,100.  
Date of annual meeting of stockholders: Third Wednesday in April.  
Fiscal year of company ends: December 31.  
General offices of the company are located at Boston, Mass., and Grand Rapids, Mich.

## GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.. { C. & W. M. R'y.....\$1,518,868 98 }		\$1,642,617 10
Total expenses, including taxes..... { C. & N. M. R. E. n. p. 44 of lat.....123,753 12 }	\$1,321,475 88	
Net income.....		\$321,141 22
Interest on funded debt.....	\$408,364 28	
Interest on unfunded debt.....	1,496 30	
Balance for the year.....		\$85,726 76
Balance (profit and loss) last year.....		78,734 05
Balance forward to next year.....		\$11,992 71

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association:		
C. & W. M. R'y.....	\$7,525,000 00	
C. & N. W. R. E.....	1,500,000 00	
Par value of shares.....	\$100 00	\$9,025,000 00
Number of shares issued.....	74,482	
Amount paid in on common.....	\$7,448,200 00	
Amount paid in on shares not issued—number 636.....	63,600 00	
Total amount paid in, as per books of the company.....		7,511,800 00
Paid in per mile of road owned by company, 581.114 miles.....		\$12,926 55

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
Grand Rapids, Newaygo & Lake Shore R. E. 2d div. 1st mortgage bonds on 10 miles of road, Newaygo to White Cloud, Mich.	7%	June 1, 1905.....	Union Trust Co., New York.....	\$19,000 00
Chicago & West Michigan R'y Co. mortgage on 488.501 miles of consolidated line, subject to above mortgage	5%	Dec. 1, 1921.....	Company's office, Boston, Mass.....	5,758,000 00
Chicago & North Michigan R. E. 1st mortgage on 92.613 miles of road, Traverse City to Elk Rapids to Bay View, principal and interest guaranteed by the Chicago & West Michigan R'y	3%	May 1, 1931.....	Boston, Mass.....	1,667,000 00
The Michigan Equipment Co. Ltd. 1st mortgage on rolling stock purchased with proceeds of bonds, principal and interest guaranteed by the Chicago & West Michigan R'y Co.	6%	June 1, 1902.....	Boston, Mass.....	298,000 00
Chicago & West Michigan R'y, ten-year coupon scrip, issued Nov. 1, 1894, in payment of 50% of C. & N. M. 5% bonds, int. due Nov. 1, 1894.	5%	Nov. 1, 1904.....	Boston, Mass.....	20,837 50
Issued Dec. 1, 1894, in payment of 50% of C. & W. M. 5% bonds, int. due Dec. 1, 1894.	5%	Dec. 1, 1904.....	Boston, Mass.....	70,512 50
Issued May 1, 1895, in payment of 50% of C. & N. M. 5% bonds, int. due May 1, 1895.	5%	May 1, 1905.....	Boston, Mass.....	20,812 50
Issued June 1, 1895, in payment of 50% of C. & W. M. 5% bonds, int. due June 1, 1895.	5%	June 1, 1905.....	Boston, Mass.....	70,450 00
Issued Nov. 1, 1895, in payment of 50% of C. & N. M. 5% bonds, int. due Nov. 1, 1895.	5%	Nov. 1, 1905.....	Boston, Mass.....	20,725 00
Issued Dec. 1, 1895, in payment of 50% of C. & W. M. 5% bonds, int. due Dec. 1, 1895.	5%	Dec. 1, 1905.....	Boston, Mass.....	70,212 50
Issued May 1, 1896, in payment of 50% of C. & N. M. 5% bonds, int. due May 1, 1896.	5%	May 1, 1906.....	Boston, Mass.....	20,675 00
Issued June 1, 1896, in payment of 50% of C. & W. M. 5% bonds, int. due June 1, 1896.	5%	June 1, 1906.....	Boston, Mass.....	69,962 50
Issued Nov. 1, 1896, in payment of 50% of C. & N. M. 5% bonds, int. due Nov. 1, 1896.	5%	Nov. 1, 1906.....	Boston, Mass.....	20,237 50
Issued Dec. 1, 1896, in payment of 50% of C. & W. M. 5% bonds, int. due Dec. 1, 1896.	5%	Dec. 1, 1906.....	Boston, Mass.....	65,650 00
Total.....				\$8,187,075 00

## CHICAGO &amp; WEST MICHIGAN RAILWAY COMPANY. 105

## UNFUNDED DEBT.

For what insured.	Is the same to be funded or how liquidated?	Amount.
For construction .....	To be paid from earnings.....	\$458,620 30
For equipment .....		
For real estate .....		
For renewals .....		
For miscellaneous .....		
For current balances .....		
Total unfunded debt.....		\$458,620 30

## RECAPITULATION.

Total funded debt .....	\$8,187,075 00
Total unfunded debt .....	458,620 30
Total debt liabilities .....	\$8,645,695 30
Amount of debt liabilities per mile of road, 581.114 miles .....	14,877 79
Total amount of stock and debt .....	16,157,495 30
Stock and debt per mile of road, 581.114 miles .....	27,804 34.

## GENERAL BALANCE SHEET.—Dr.

Construction account:		
C. & W. M. R'y .....		\$11,107,460 14
C. & N. M. R. E. .....		1,809,880 04
Equipment account .....		1,508,485 59
Equipment account, Michigan Equipment Co. (L'td.) .....		233,000 00
Other investments:		
C. & W. M. R'y stock scrip .....	\$21 30	
Muskegon Lake R. E. stock .....	33,600 00	
C. & N. M. R. E. capital stock .....	810,000 00	843,621 30
Cash items:		
Cash .....	\$99,375 52	
Bills receivable .....	208,727 04	
Due from agents .....	82,260 88	340,363 44
Other assets:		
Materials and supplies .....	\$80,214 79	
Sinking funds .....	4,000 00	
Debit balances from companies and individuals .....	163,477 29	247,692 08
Income account .....		11,992 71
Total .....		\$16,157,495 30

## GENERAL BALANCE SHEET.—Cr.

Capital stock .....		\$7,511,800 00
Funded debt .....	\$7,787,000 00	
C. & W. M. R'y 5% coupon scrip .....	450,075 00	8,187,075 00
Unfunded debt:		
Interest unpaid .....	\$216,868 08	
Vouchers and accounts .....	195,780 04	
Other liabilities (list as follows):		
Net traffic balances due other companies .....	25,972 18	
Sinking fund (Michigan Equipment Co., limited) .....	20,000 00	458,620 30
Total .....		16,157,495 30

## COST OF ROAD AND EQUIPMENT.

## PURCHASED BY PRESENT COMPANY.

When purchased: October 1, 1881.	
Original cost to present company, of road and equipment .....	\$8,578,430 84
Amount expended since purchase, account of construction .....	3,070,017 06
Amount expended since purchase, account of equipment .....	962,497 83
Total cost to date of report .....	12,610,945 78
Average cost per mile of road (not including sidings) 488.501 miles .....	25,815 60
Proportion of cost for Michigan .....	11,721,180 18

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

MAIN LINE.		
Extensions and new sidings.....	\$19,280 80	
New buildings.....	15,774 28	
		\$35,055 08
BRANCHES.		
Right of way.....		1,578 88
Real estate.....		17,100 74
Total charges.....		\$53,728 95
Total charges to property account as above.....	\$53,728 95	
Property sold and credited.....	25 00	
Net addition to property account.....		<u>53,703 95</u>

## ANALYSIS OF EARNINGS.—IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

	Local fares.	Through fares.	Total passen- gen fares.	Express and baggage.	Mails.	Total.	Per train mille.	Per mile of road.
Main line and branches.....	\$443,080 96	\$7,402 11	\$450,483 07	\$80,253 55	\$53,967 34	\$589,718 96	\$0 73	\$1,188 72
<i>Leased or proprietary roads:</i> C. & N. M. R., north of parallel 44 of latitude.....	44,591 10	-----	44,591 10	6,097 21	8,372 72	59,061 03	-----	637 71
Total passenger department earnings.....	\$492,652 06	\$7,402 11	\$500,054 17	\$86,355 76	\$62,340 06	\$686,779 99	\$0 73	\$1,826 43

## FREIGHT EARNINGS.

	Local traffic.	Through traffic.	Total traffic.	Other sources, freight department.	Total.	Per train mille.	Per mile of road.
Main line and branches.....	\$341,757 96	\$21,235 14	\$363,053 10	\$7,723 46	\$370,776 56	\$1 25	\$1,917 86
<i>Leased or proprietary roads:</i> C. & N. M. R., north of parallel 44 of latitude.....	64,692 09	-----	64,692 09	-----	64,692 09	-----	698 52
Total freight department earnings.....	\$306,450 05	\$21,235 14	\$327,685 19	\$7,723 46	\$335,408 65	\$1 25	\$2,616 38

## ANALYSIS OF EARNINGS.—ENTIRE LINES.

PASSENGER EARNINGS.		
Main line and branches:		
Local fares.....	\$526,697 92	
Through fares.....	7,964 02	
Total passenger fares.....	\$534,661 94	
Express and baggage.....	38,652 77	
Mails.....	66,436 87	
Total passenger department earnings.....		\$639,751 58
Per train mile.....	\$0 81	
Per mile of road.....	1,100 91	
FREIGHT EARNINGS.		
Main line and branches:		
Local traffic.....	\$970,350 27	
Through traffic.....	22,911 72	
Total traffic.....	\$993,261 99	
Other sources, freight department.....	8,306 77	
Total freight department earnings.....		1,001,571 76
Per train mile.....	\$1 33	
Per mile of road.....	1,723 53	
Total transportation earnings, entire lines:		
C. & W. M. R'y.....	\$1,517,570 22	
C. & N. M. R. R.....	123,753 12	
Transportation earnings per mile of road.....	\$2,824 44	1,641,323 84
Transportation earnings per train mile.....	1 06	
Miscellaneous receipts from operating account, other than for transportation, as follows:		
From other sources.....		1,298 76
Total.....		\$1,642,617 10
Total earnings from operation of road:		
C. & W. M. R'y.....	\$1,518,863 98	
C. & N. M. R. R.....	123,753 12	
Total earnings per mile of road.....	\$2,826 67	1,642,617 10
Total earnings per train mile.....	1 06	
Proportion of taxable earnings for Michigan.....		1,411,698 01
Total taxable earnings per mile of road in Michigan.....		3,109 23
Total income from all sources.....		1,642,617 10
Proportion of income from Michigan:		
C. & W. M. R'y.....	\$1,411,698 01	
C. & N. M. R. R.....	123,753 12	
		1,535,451 18

## ANALYSIS OF EXPENSES.

MAINTENANCE OF WAY AND STRUCTURES.		
Repairs of roadway.....	\$186,829 87	
Renewals of rails.....	15,480 26	
Renewals of ties.....	104,833 95	
Repairs and renewals of bridges and culverts.....	16,937 24	
Repairs and renewals of fences, road crossings, signs and cattle guards.....	12,591 29	
Repairs and renewals of buildings and fixtures.....	20,008 80	
Repairs and renewals of docks and wharves.....	1,326 80	
Repairs and renewals of telegraph.....	3,194 29	
Stationery and printing.....	358 10	
Other expenses.....	5,243 98	
Total.....	\$366,834 58	
MAINTENANCE OF EQUIPMENT.		
Superintendence.....	\$5,819 90	
Repairs and renewals of locomotives.....	63,401 61	
Repairs and renewals of passenger cars.....	38,043 23	
Repairs and renewal of freight cars.....	71,446 66	
Repairs and renewals of work cars.....	1,118 28	
Repairs and renewals of shop machinery and tools.....	2,972 77	
Stationery and printing.....	621 43	
Other expenses.....	6,552 82	
Total.....	\$189,976 70	



## CONDUCTING TRANSPORTATION.

Superintendence.....	\$21,452 46
Engine and roundhouse men.....	122,814 59
Fuel for locomotives.....	129,051 23
Water supply for locomotives.....	10,715 41
Oil, tallow and waste for locomotives.....	8,861 99
Other supplies for locomotives.....	1,321 23
Train service.....	90,793 05
Train supplies and expenses.....	20,818 75
Switchmen, flagmen and watchmen.....	52,396 89
Telegraph expenses.....	24,960 58
Station service.....	104,167 66
Station supplies.....	8,275 44
Car mileage—balance.....	4,120 43
Hire of equipment.....	14,017 31
Loss and damage.....	6,227 39
Injuries to persons.....	4,666 46
Clearing wrecks.....	891 10
Advertising.....	7,104 24
Outside agencies.....	18,213 23
Commissions.....	9 38
Rents for tracks, yards and terminals.....	10,332 90
Rent of buildings and other property (less).....	1,710 61
Stationery and printing.....	17,890 17
Other expenses.....	229 56
<b>Total.....</b>	<b>\$667,590 78</b>

## GENERAL EXPENSES.

Salaries of general officers.....	\$17,388 32
Salaries of clerks and attendants.....	23,532 78
General office expenses and supplies.....	2,118 54
Insurance.....	6,817 71
Law expenses.....	5,534 97
Stationery and printing (general offices).....	2,325 82
Other expenses.....	1,671 62
Taxes.....	38,194 06
<b>Total.....</b>	<b>\$97,073 82</b>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	27.76	\$386,834 58
Maintenance of equipment.....	14.37	189,976 70
Conducting transportation.....	50.52	667,590 78
General expenses, including taxes.....	07.35	97,073 82
<b>Total operating expenses and taxes.....</b>	<b>100.00</b>	<b>\$1,321,475 88</b>
Operating expenses and taxes per mile of road.....		2,274 03
Operating expenses and taxes per train mile run, for trains earning revenue, 1,545,448 miles.....		85
Proportion of operating expenses and taxes for Michigan, main line.....		1,243,091 68
<b>Total proportion of expenses for Michigan.....</b>		<b>\$1,243,091 68</b>
Percentage of expenses to earnings, including taxes.....	80.45	
Net earnings per mile of road.....		552 64
Net earnings per train mile.....		21

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini: December 3, 1883.

## MAIN LINE.

	Miles.	Miles.
In Michigan, from Indiana State line to Traverse City.....	285.36	
In Indiana from Michigan State line to La Crosse.....	24.46	
<b>Total length completed.....</b>		<b>299.82</b>

## BRANCHES.

From Allegan to Pentwater.....	98.55	
From Big Rapids Junction to Big Rapids.....	51.80	
From Mears to Hart.....	3.78	
From Kirk's Junction to Muskegon.....	11.98	
From Pickands to Fruitport.....	1.76	
From Macatawa Junction to Ottawa Beach.....	6.18	
From Clary to Honor.....	9.62	
From Muskegon to Port Sherman.....	5.21	
Total length of branches owned by company.....		188.68
Total length of branches owned by company in Michigan.....	188.68	
Total length of road belonging to this company.....		488.50
Total length of road belonging to this company in Michigan.....	454.04	
Aggregate length in Michigan of sidings, spurs and other tracks not above enumerated.....	155.01	
Aggregate length of tracks in Michigan belonging to this company, computed as single track.....		609.05
Gauge of track, 4 feet 8½ inches.		

## Proprietary or leased roads operated by this company.

Name, description and length of each:	Total miles. In Michigan.	
Chicago & North Michigan R. R., north of parallel 44 of latitude.....	92.613	92.613
Total miles operated by the company.....		92.613

If north of parallel 44 of latitude:  
Yes.

Give date road commenced to be built:  
May 15, 1891.

Give date road completed:  
July 15, 1892.

Give date road commenced to be operated:  
June 26, 1892.

Where built from and to:  
Traverse City to Bay View, 79.021; Elk Rapids to Williamsburg, 9.512; Iron-ton to Cherris, 4.080.

Give exact number of miles:  
92.613.

## Number of bridges and trestles in Michigan.

	Number.	Aggregate length, feet.
Wooden bridges.....	7	686¼
Stone bridges.....	1	20
Iron bridges.....	21	2,783
Combination bridges.....	4	688
Wooden trestles.....	164	19,732
Total.....	197	23,909¼

## Draw bridges in Michigan.

How many on your line.....	6
Where located, when built, and length of draw span:	Feet.
1. St. Joseph, 1889.....	284
2. Grand Rapids, 1882.....	162
3. Muskegon, 1891.....	46
4. Montague, 1894.....	46
5. Elk Rapids, 1892.....	101
6. Charlevoix, 1892.....	214

Character of structure:  
Nos. 1, 2, 6 through trusses, two openings; No. 5 through girder, one opening; Nos. 3 and 4, deck girders, one opening.

Material of which constructed:  
Nos. 1, 3, 4, 5, 6, iron; No. 2, iron and wood.

Height above water, and depth of water under bridge:

	Feet above water.	Water, feet deep.
No. 1.....	18	15
No. 2.....	18	8
No. 3.....	7½	4
No. 4.....	6½	6
No. 5.....	4	10
No. 6.....	12	15

How swung, by engine or hand power?  
Hand power.Approaches straight or curved?  
Nos. 1 and 2 curved, 3, 4, 5, 6, straight.Do you require all trains to come to full stop before crossing a draw, and how are they signalled?  
Yes; flagged by watchmen.*Crossings.—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?

South Haven & Eastern R. R. at Hartford.  
Michigan Central R. R. at Grand Junction.  
Lake Shore & Michigan Southern R. R. near Grandville.  
Grand Rapids & Indiana R. R. at Godfrey's, Grand Rapids, Mill Creek and Traverse City.  
Flint & Pere Marquette R. R. at Baldwin.  
Manistee & Grand Rapids R. R. at Canfield.  
Manistee & Luther R. R. at Peters.  
Manistee and North Eastern R. R. at Bear Creek, Manistee Crossing and Interlochen.  
Arcadia & Betsay River R. R. at Henry.  
Ann Arbor R. R. at Thompsonville.  
Toledo, Saginaw and Muskegon R. R. at Muskegon and Sparta.  
Detroit, Grand Haven & Milwaukee R. R. at D. & M. Junction.

What railroads cross your road either over or under your grade in this State, and where?

Under:  
M. C. R. R. 1½ miles south New Buffalo.

At what crossings are interlocking and derailing switches in operation?

S. H. & E. R. R. at Hartford.  
M. C. R. R. at Grand Junction.  
L. S. & M. S. R'y near Grandville.  
G. R. & I. at Godfrey's, Grand Rapids and Traverse City.  
F. & P. M. R. R. at Baldwin.  
M. & G. R. R. at Canfield.  
M. & L. R. R. at Peters.  
M. & N. E. R. R. at Bear Creek, Manistee Crossing and Interlochen.  
A. & B. R. R. at Henry.  
A. A. R. R. at Thompsonville.  
T. S. & M. R'y at Muskegon and Sparta.

What pattern or patterns have you adopted?

Allentown, Gravitt Union Switch &amp; Signal Co., American Signal Co.

Number of crossings of highways at grade in this State..... 654

Number of crossings of highways at grade in this State at which there are gates or  
flagmen..... 30

Number of crossings at which there are electric or automatic signals..... 1

What pattern or patterns in use?

O'Neil.

Number of crossings of highways over or under railroad:

Over 14, under 11.

Number of highway bridges 18 feet above track..... 13

Number of highway bridges less than 18 feet above track..... 1

Have safety guards been erected at overhead obstructions?

Yes.

Are your frogs and guard rails blocked as required by act 174, session laws of 1883?

Yes.

How are they treated?

Hart guards and blocked with plank.

*Stations.*

Number of stations on whole lines..... 108

Same in Michigan..... 101

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials 1,474  
 Same in Michigan 1,419

Classify your employees as per following list:

	Number.
Baggagemen.....	12
Brakemen.....	70
Conductors.....	41
Engineers.....	66
Firemen.....	67
Laborers.....	508
Shopmen.....	82
Yardmen.....	47
Others.....	625

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you?..... 894  
 Give the number of miles required to complete fence both sides of your track in Michigan,  
 and the counties in which needed:  
 Newaygo, Oceana, Lake, Antrim and Charlevoix counties.  
 Total miles required: 87.

*Road bed and track.*

Number of track sections in Michigan.....	108
Average length of sections (miles).....	5.3
Average number of men in each section gang.....	3
Number of new ties put in whole line during the year.....	399,378
Number of new ties put in track in Michigan.....	325,721
Average number of new ties per mile of road.....	584

*Bridges and culverts.*

Amount of trestle work replaced with earth during the year (linear feet).....	49
	Number.
Timber culverts replaced during the year.....	27
With iron pipe.....	4
With sewer pipe.....	23
New bridges built during the year.....	10

No.	Location.	Kind.	Material.	Month built.	Feet in length.
38.2	New Buffalo.....	Frame trestle.....	Wood.....	February.....	235
118.7	New Richmond.....	Deck girder.....	Steel.....	September.....	70
132.5	Zeeland.....	Frame trestle.....	Wood.....	April.....	11
141.8	Hudsonville.....	Pile trestle.....	Wood.....	July.....	30
142	Hudsonville.....	Pile trestle.....	Wood.....	July.....	120
375.9	South Petoskey.....	Frame trestle.....	Wood.....	September.....	11
A 13.9	North Hamilton.....	Frame trestle.....	Wood.....	January.....	12
A 30.1	North Holland.....	Pile trestle.....	Wood.....	June.....	15
A 57.7	Muskegon.....	Pile trestle.....	Wood.....	February.....	74
B 23.7	Fremont.....	Pile trestle.....	Wood.....	January.....	96

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender.....	54	\$139,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender.....	22	55,000 00
Number of locomotives of 10 to 20 tons weight, exclusive of tender.....	1	1,000 00
Total.....	77	\$245,000 00
Number of passenger cars—8-wheel, including official cars.....	46	\$115,000 00
Number of express and baggage cars.....	27	40,500 00
Number of box freight cars.....	1,759	439,750 00
Number of stock cars.....	25	6,250 00
Number of platform cars.....	1,084	180,950 00
Number of conductors' way cars.....	31	6,200 00
Other cars as follows: Tool, 5; excavators, 2; pile driver, 1; snow plows, 6; painter, 1; carpenter, 3; tender to excavator, 1; boarding, 1; store material, 1; log, 24.....	45	7,900 00
Total.....	2,967	\$1,041,550 00

Number of locomotives equipped with power brakes.....	74
Number of passenger-train cars equipped with power brakes.....	73
Number of freight cars equipped with power brakes.....	346
What patterns of power brakes have you in use, and number of locomotives and cars with each?	
Locomotives, Westinghouse.....	55
Locomotives, New York.....	9
Locomotives, American steam.....	10
Locomotives, Nil.....	8
Passenger, Westinghouse.....	73
Freight, Westinghouse.....	346

Are your freight cars being equipped with automatic couplers as required by Act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?  
Yes.

What pattern or patterns have you adopted for use?  
Gould Automatic.

How are your passenger cars heated?  
Steam from locomotive.

## MILEAGE, TRAFFIC, ETC.

*Train mileage.*

	Entire lines.	In Michigan.
Miles run by passenger trains during the year .....	798,985	746,902
Miles run by freight trains during the year .....	751,463	706,901
Miles run by mixed trains .....	64,144	
Total mileage of trains earning revenue .....	1,545,448	1,453,803

*Passenger traffic.—Entire lines.*

	Numbers.	Miles.	Rate.
Number of through passengers carried, earning revenue.....	5,026		
Number of local passengers carried, earning revenue .....	761,811		
Total number of passengers carried, earning revenue .....	766,837		
Number of passengers carried one mile .....	24,972,288	32,565	
Average distance carried.....			\$0 69.723
Average amount received from each passenger .....			01.004
Average receipts per mile for through passengers .....			02.178
Average receipts per mile for local passengers .....			02.141
Average receipts per passenger per mile for all passengers .....			

*Passenger traffic.—In State of Michigan.*

Number of through passengers carried, earning revenue.....	4,728		
Number of local passengers carried, earning revenue .....	716,635		
Total number of passengers carried, earning revenue .....	721,363		
Number of passengers carried one mile .....	24,391,431	30.634	
Average distance carried.....			\$0 65.588
Average amount received from each passenger .....			00.944
Average receipts per mile for through passengers .....			02.049
Average receipts per mile for local passengers .....			
Average receipts per passenger per mile for all passengers .....			02.014

*Freight traffic movement.—Entire lines.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue .....	22,375		
Number of tons of local freight carried, earning revenue .....	1,152,852		
Total tons of freight carried, earning revenue .....	1,174,727		
Total mileage of through freight.....	2,663,065		
Total mileage of local freight.....	89,892,136		
Total freight mileage or tons carried one mile .....	92,556,201		
Average ton haul for through freight .....	119,020		
Average ton haul for local freight.....	78,042		
Average ton haul for all freight.....	78,823		
Average amount received for each ton haul.....			\$0 84.533
Average receipts ton per mile, for through freight .....			.800
Average ton receipts per mile, for local freight .....			01.079
Average receipts ton per mile, for all freight .....			01.078

*Freight traffic.—In State of Michigan.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	21,048		
Number of tons of local freight carried, earning revenue.....	1,084,017		
Total tons of freight carried, earning revenue.....	1,105,065		
Total mileage of through freight.....		2,405,145	
Total mileage of local freight.....		84,599,180	
Total freight mileage or tons carried one mile.....		87,004,305	
Average ton haul for through freight.....		111,932	
Average ton haul for local freight.....		78,414	
Average ton haul for all freight.....		74,141	
Average amount received for each ton haul.....			\$0 79.539
Average receipts ton per mile, for through freight.....			00.809
Average receipts ton per mile, for local freight.....			01.015
Average receipts ton per mile, for all freight.....			01.009

## FREIGHT TRAFFIC MOVEMENT.—ENTIRE LINES.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	25,754	20,643	46,397	3.96
Flour.....	15,019	2,718	17,737	1.51
Other mill products.....	61	104	165	.01
Hay.....	11,108	5,663	16,766	1.43
Fruit and vegetables.....	97,659	17,562	115,221	9.81
<b>Products of animals:</b>				
Live stock.....	5,745	871	6,616	.56
Dressed meats.....	170	2,087	2,257	.19
Other packing house products.....	152	1,030	1,182	.10
Poultry, game and fish.....	709	2	711	.06
Wool.....	122	63	180	.02
Hides and leather.....	4,933	4,190	9,123	.78
<b>Products of mines:</b>				
Anthracite coal.....		12,787	12,787	1.09
Bituminous coal.....	210	89,580	89,790	7.64
Stone, sand and other like articles.....	42,308	1,136	43,444	3.70
Salt.....	106	9,274	9,380	.80
<b>Products of forest:</b>				
Lumber.....	434,343	60,676	495,019	42.14
Charcoal.....	15,233	7,380	22,563	1.92
<b>Manufactures:</b>				
Petroleum and other oils.....	2,896	3,176	6,012	.51
Iron, pig and bloom.....	22,471	1,818	24,289	2.07
Iron and steel rails.....	208	2,381	2,589	.22
Other castings and machinery.....	902	749	1,651	.14
Bar and sheet metal.....	4	1,276	1,280	.11
Cement, brick and lime.....	31,519	3,585	35,104	2.99
Agricultural implements.....	535	768	1,303	.11
Wagons, carriages, tools, etc.....	1,171	322	1,493	.13
Wines, liquors and beers.....	2,394	3,120	5,514	.47
Household goods and furniture.....	24,421	1,685	26,106	2.22
<b>Merchandise.....</b>	<b>87,818</b>	<b>30,300</b>	<b>118,118</b>	<b>10.06</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	41,901	20,019	61,920	5.27
<b>Total tonnage.....</b>	<b>469,807</b>	<b>304,920</b>	<b>1,174,727</b>	<b>100.00</b>

## FREIGHT TRAFFIC MOVEMENT.—IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	25,390	13,958	39,348	3.62
Flour.....	14,650	2,614	17,264	1.59
Other mill products.....	61	92	153	.01
Hay.....	9,818	4,517	14,335	1.32
Fruit and vegetables.....	97,657	17,478	115,135	10.61
<b>Products of animals:</b>				
Live stock.....	5,740	768	6,508	.60
Dressed meats.....	169	2,029	2,198	.20
Other packing house products.....	152	925	1,080	.10
Poultry, game and fish.....	709	2	711	.07
Wool.....	122	44	166	.02
Hides and leather.....	4,875	3,492	8,367	.77
<b>Products of mines:</b>				
Anthracite coal.....		7,589	7,589	.70
Bituminous coal.....	210	46,370	46,580	4.29
Stone, sand and other like articles.....	42,308	983	43,291	3.99
Salt.....	106	9,146	9,252	.85
<b>Products of forest:</b>				
Lumber.....	434,080	55,006	489,086	45.06
Charcoal.....	15,233	6,977	22,210	2.05
<b>Manufactures:</b>				
Petroleum and other oils.....	2,806	1,615	4,423	.41
Iron, pig and bloom.....	22,471	1,121	23,592	2.17
Iron and steel rails.....	208	1,543	1,751	.16
Other castings and machinery.....	884	628	1,512	.14
Bar and sheet metal.....	4	306	310	.03
Cement, brick and lime.....	31,327	2,229	33,556	3.09
Agricultural implements.....	362	473	835	.08
Wagons, carriages, tools, etc.....	439	307	746	.07
Wines, liquors and beers.....	2,359	2,807	5,166	.48
Household goods and furniture.....	24,374	1,485	25,859	2.38
<b>Merchandise.....</b>	<b>86,982</b>	<b>25,312</b>	<b>112,244</b>	<b>10.34</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	38,847	18,273	52,120	4.80
<b>Total tonnage.....</b>	<b>862,235</b>	<b>223,092</b>	<b>1,085,387</b>	<b>100.00</b>

## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The American Express Co. at an agreed rate; they handle their own freight at railway company's depot.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

1,741 miles. 1,470 miles of wire belong to the Western Union Telegraph Co.; 271 miles of wire belong to the C. & W. M. R'y on W. U. Tel. Co. poles.

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

## KILLED.

April 15, C. Everts, citizen, Bellaire. Walking on track, struck by train.  
 October 29, Henry Lewis, citizen, Big Rapids Junction. Catching on moving train.  
 October 24, Mrs. Modrow, citizen, Lumberton. Walking on track at night, struck by hand car.  
 July 25, H. Tinkey, citizen, East Saugatuck. Boy playing on track, struck by train.  
 October 1, Frank Wilson, citizen, Pearl. Lying asleep on track; intoxicated.

## INJURED.

February 26, John Bonga, citizen, Grand Rapids. Cars collided account breaking of brake chain.  
 June 7, W. E. Bockes, citizen, Traverse City. Jumping on moving train.  
 April 20, Lena Costic, citizen, Benton Harbor. Child playing on track.  
 April 13, Stephen Dykstra, citizen, Grand Haven. Climbing between cars on siding.  
 October 12, Leonard Ryke, citizen, Muskegon. Struck by engine at private crossing.  
 October 12, James Frazer, citizen, Muskegon. Struck by engine at private crossing.  
 October 13, Andrew Hass, citizen, Watervliet. Driving on right of way, struck by train.  
 June 9, James Knapp, brakeman, Waverly. Coupling, accidental.  
 September 4, Rich. Kimmo, citizen, St. Joseph. Boy climbing between cars.  
 April 26, George Phelps, brakeman, Petoskey. Struck by fish-chute at side of track.  
 March 7, Abram Streeter, citizen, Bellaire. Struck by train at crossing.  
 April 30, Lucinda Steele, citizen, Watervliet. Alighting from moving train.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Cause of accident.	Killed.			Injured.		
	Passengers.	Employée.	Others.	Passengers.	Employée.	Others.
Collisions .....				1		
Coupling cars .....					1	
Getting on and off trains .....				2		
Miscellaneous .....						3
Overhead obstructions .....					1	
Trespassers on trains .....			1			3
Trespassers on tracks .....			4			2
<b>Total</b> .....			5	3	2	7

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year .....	5
Number of persons injured during the year .....	12
Number of casualties purely accidental .....	2
Number resulting from lack of caution, carelessness or misconduct .....	15
Persons killed or injured while intoxicated .....	1
Trespassers or tramps killed or injured .....	9

## CLASSIFICATION OF EMPLOYÉS.

## KILLED OR INJURED IN MICHIGAN.

Brakemen—injured .....	2
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STATE OF MICHIGAN, } ss.  
 COUNTY OF KENT, }

Charles M. Heald, general manager, and U. B. Rogers, auditor, of the Chicago and West Michigan Railway Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF E. R.]

Signed,

CHAS. M. HEALD,  
 U. B. ROGERS.

Subscribed and sworn to before me this 12th day of April, A. D. 1897.

[L. S.]

HENRY J. BRODERICK,  
 Notary Public, Kent Co., Mich.



**ANNUAL REPORT**  
**OF THE**  
**CHICAGO & NORTH MICHIGAN RAILROAD COMPANY,**

*For the year ending December 31, 1896.*

[Filed April 14, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President, CHAS. M. HEALD, Grand Rapids, Mich.*  
*Secretary, GEO. F. WEIDMAN, Grand Rapids, Mich.*  
*Treasurer, F. H. DAMON, Boston, Mass.*  
*Transfer Agent, F. H. DAMON, Boston, Mass.*

**DIRECTORS.**

*F. H. DAMON, Boston, Mass.*  
*F. A. NIMS, Muskegon, Mich.*  
*CHAS. M. HEALD, Grand Rapids, Mich.*  
*WM. ALDEN SMITH, Grand Rapids, Mich.*  
*U. B. ROGERS, Grand Rapids, Mich.*  
*J. E. HOWARD, Grand Rapids, Mich.*  
*GEO. F. WEIDMAN, Grand Rapids, Mich.*  
*Terms expire April 21, 1897.*

• **STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: March 2, 1891.  
 Number of stockholders at date of last election: 8.  
 Number of stockholders in Michigan at same date: 6.  
 Amount of full paid stock held in Michigan at same date: \$69,000.00.  
 Date of annual meeting of stockholders: Third Wednesday in April.  
 Fiscal year of company ends December 31.  
 General offices of the company are located at Grand Rapids, Mich.

**ANALYSIS OF CAPITAL STOCK.**

Amount authorized by charter or articles of association .....		\$1,500,000 00
Par value of shares .....	\$100 00	
Average price received per share .....	100 00	
Number of shares issued .....	8,335	
Amount paid in on common .....	\$810,000 00	
 Total amount paid in as per books of the company .....		 810,000 00
 Paid in per mile of road owned by company .....		 8,746 07

**ANALYSIS OF DEBT ACCOUNTS.**

**FUNDED DEBT.**

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage on 92.613 miles of road, Traverse City to Elk Rapids to Bay View. Principal and interest guaranteed by the C. & W. M. Ry. Co. ....	5%	May 1, 1931 .....	Boston, Mass. ....	\$1,667,000 00

## RECAPITULATION.

Total funded debt .....	\$1,667,000 00
Total unfunded debt, included in C. & W. M. Ry. report.	
Total debt liabilities .....	1,667,000 00
Total amount of stock and debt .....	2,477,000 00
Stock and bonded debt per mile of road .....	26,745 70

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year .....	\$83,350 00
Was it paid for the last year? One-half cash, $\frac{1}{2}$ C. & W. M. coupon scrip due in ten years.	

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction .....	\$1,809,880 04
Average cost of construction per mile of road (not including sidings), 92.613 miles .....	19,542 35
Proportion of cost of construction for Michigan .....	1,809,880 04

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
July 15, 1892.

## MAIN LINE.

Length completed in Michigan:	Miles.	Miles.
Traverse City to Bay View .....	79.021	
Total length completed .....		79.021

## BRANCHES.

From Williamsburg to Elk Rapids .....	9.512
From Cherrie to Ironton .....	4.080
Total length of branches owned by company .....	13.592
Total length of road belonging to this company in Michigan .....	92.613

Gauge of track, 4 feet 8 $\frac{1}{2}$  inches.

STATE OF MICHIGAN, } ss.  
COUNTY OF KENT,

Chas. M. Heald, president, and Geo. F. Weidman, secretary, of the Chicago & North Michigan Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF E. E.]

Signed,

CHAS. M. HEALD, *President.*  
GEO. F. WEIDMAN, *Secretary.*

Subscribed and sworn to before me this 12th day of April, A. D. 1897.

[L. S.]

HENRY J. BRODERICK,  
*Notary Public, Kent County, Mich.*

**ANNUAL REPORT**  
OF THE  
**JACKSON & CINCINNATI RAILWAY COMPANY,**  
PART OF CINCINNATI, JACKSON & MACKINAW SYSTEM.

*For the year ending December 31, 1896.*

[Filed May 11, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President, F. B. DRAKE, Toledo, Ohio.*  
*Secretary, W. F. BOOTH, Toledo, Ohio.*

**DIRECTORS.**

F. B. DRAKE, Toledo, Ohio.  
B. A. HAYES, Toledo, Ohio.  
ROBT. TUCKER, Toledo, Ohio.  
W. F. BOOTH, Toledo, Ohio.  
F. B. SWAYNE, Toledo, Ohio.  
Terms expire August 12, 1897.

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: August 12, 1895.  
Number of stockholders at date of last election: 8.  
Date of annual meeting of stockholders: Second Thursday in August.  
Fiscal year of company ends June 30.  
General offices of the company are located at Toledo, Ohio.

**REMARKS.**

Leased to Frank B. Drake, receiver of the Cincinnati, Jackson & Mackinaw R'y, who takes all earnings and pays all expenses.

**ANALYSIS OF CAPITAL STOCK.**

Amount authorized by charter or articles of association.....		\$180,000 00
Par value of shares.....	\$100	
Average price received per share.....	100	
No. of shares issued.....	1,600	
Amount paid in on common.....		160,000 00
Total amount paid in, as per books of the company.....		160,000 00
Paid in per mile of road owned by company.....		9,065 15

**ANALYSIS OF DEBT ACCOUNTS.**

**FUNDED DEBT.**

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage.....	5%	Sept. 1, 1945....	New York.....	\$300,000 00

## MICHIGAN RAILROAD RETURNS, 1896.

## RECAPITULATION.

Total funded debt .....	\$300,000 00
Total debt liabilities .....	\$300,000 00
Amount of debt liabilities per mile of road, 17.65 miles .....	16,997 17
Total amount of stock and debt .....	480,000 00
Stock and debt per mile of road .....	26,082 32

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year .....	15,000 00
------------------------------------------------	-----------

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini: April 26, 1896.

## MAIN LINE.

	Miles.
Length completed in Michigan, Addison Junction to Jackson .....	17.65
Total length completed .....	17.65

## BRANCHES.

Total length of road belonging to this company .....	17.65
Total length of road belonging to this company in Michigan .....	17.65
Aggregate length of sidings, spurs and other tracks not above enumerated .....	1.26
Same in Michigan .....	1.26
Aggregate length of tracks belonging to this company, computed as single track .....	18.91
Same in Michigan .....	18.91

Gauge of track, 4 feet 8½ inches.

STATE OF OHIO, }  
COUNTY OF LUCAS, } ss.

F. B. Drake, president, and W. F. Booth, secretary, of the Jackson & Cincinnati Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full and correct statement of the stock, debt and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

F. B. DRAKE, *President.*

W. F. BOOTH, *Secretary.*

Subscribed and sworn to before me this 10th day of May, A. D. 1897.

B. H. HAYES,  
*Notary Public, Lucas County, Ohio.*

ANNUAL REPORT  
OF THE  
CINCINNATI, JACKSON & MACKINAW RAILWAY COMPANY,

FRANK B. DRAKE, *Receiver*,

*For the year ending December 31, 1896.*

[Filed May 11, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, CALVIN S. BRICE, New York.  
*Vice President*, GEO. L. BRADBURY, Chicago, Ill.  
*Secretary and Treasurer*, L. M. SCHWAN, New York.  
*Auditor*, W. F. BOOTH, Toledo, Ohio.  
*General Manager*, F. B. DRAKE, Toledo, Ohio.  
*Superintendent*, J. B. FLANDERS, Toledo, Ohio.  
*Division Superintendent*, W. F. BACCUS, Van Wert, Ohio.  
*Superintendent of Telegraph*, FRANK ALLEN, Toledo, Ohio.  
*Cashier*, O. A. WILSON, Toledo, Ohio.  
*General Passenger Agent*, T. C. M. SCHINDLER, Toledo, Ohio.  
*General Freight Agent*, C. W. COOK, Toledo, Ohio.  
*Attorney*, { SWAYNE, HAYES & TYLER, Toledo, Ohio.  
                   { C. N. HASKELL, New York.  
*Receiver*, FRANK B. DRAKE, Toledo, Ohio.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: Receiver appointed December 6, 1894.  
 Fiscal year of company ends June 30.  
 General offices of the receiver are located at Toledo, Ohio.

GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$707,086 36
Total expenses including taxes.....	\$636,968 57	
Net income .....		\$70,117 79
Interest on unfunded debt.....	\$5,259 10	
Rentals of buildings, tracks, etc.....	44,491 19	
Balance applicable to dividends.....		\$20,367 50
Balance for the year.....		\$20,367 50
Balance (profit and loss) last year .....		46,197 61
Balance forwarded to next year .....		\$66,565 11

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
Receivers' certificates, various dates in 1896	6%	Two years after date	New York	\$173,322 60

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For current balances		\$247,668 83

## RECAPITULATION.

Total funded debt	\$173,322 60
Total unfunded debt	247,668 83
Total debt liabilities	\$420,991 43
Amount of debt liabilities per mile of road owned or leased, 341.35 miles	1,233 31
Total amount of stock and debt	420,991 43
Stock and debt per mile of road owned and leased, 341.35 miles	1,233 31

## GENERAL BALANCE SHEET.—Dr.

Improvement account		
Equipment account	\$304,980 11	
Other investments (specifying same):		
The Cincinnati, Jackson & Mackinaw R'y Co.	37,857 80	
Suspense accounts	1,829 32	
		\$344,647 23
Cash items:		
Cash	\$10,871 58	
Due from agents	37,615 54	
		48,487 12
Other assets:		
Materials and supplies	\$49,431 91	
Debit balances from companies and individuals	38,670 83	
Unearned insurance	344 50	
Cincinnati Northern R'y Co.	24,125 61	
		107,572 85
Total		\$500,707 20

## GENERAL BALANCE SHEET.—Cr.

Funded debt—receiver's certificates	\$173,322 60
Destroyed car fund	2,279 08
Unfunded debt:	
Interest unpaid	\$3,720 96
Vouchers and accounts	220,964 28
Other liabilities:	
Accrued taxes	34,855 17
	258,540 41
Profit and loss or income accounts	66,565 11
Total	\$500,707 20

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Extensions and new sidings	\$41,270 06
Miscellaneous improvements	11,193 22
New buildings	21,020 14
New fences	6,978 45
Machinery and tools	47,679 32
New locomotives	47,102 30
New cars	41,880 24
Total	\$216,573 78
Total charges to property account as above	216,573 78
Net addition to property account	216,573 78

## ANALYSIS OF EARNINGS—IN STATE OF MICHIGAN.

PASSENGER EARNINGS.		
Main line and branches:		
Local fares .....	\$39,660 29	
Through fares .....	7,719 08	
Total passenger fares .....	\$77,879 35	
Express and baggage .....	15,662 57	
Mails .....	11,431 41	
Total passenger department earnings .....		\$104,473 33
Per train mile .....	\$0 46	
Per mile of road .....	556 81	
FREIGHT EARNINGS.		
Main line and branches:		
Local traffic .....	176,708 04	
Through traffic .....	35,277 50	
Total traffic .....	\$211,985 54	
Total freight department earnings .....		211,935 54
Per train mile .....	\$0 96	
Per mile of road .....	1,129 81	

## ANALYSIS OF EARNINGS.—ENTIRE LINES.

PASSENGER EARNINGS.		
Main line and branches:		
Local fares .....	\$153,885 53	
Through fares .....	17,052 06	
Total passenger fares .....	\$170,937 59	
Express and baggage .....	34,599 96	
Mails .....	25,252 96	
Total passenger department earnings .....		\$230,790 51
Per train mile .....	\$0 46	
Per mile of road .....	556 81	
FREIGHT EARNINGS.		
Main line and branches:		
Local traffic .....	\$90,363 17	
Through traffic .....	77,931 02	
Total traffic .....	\$468,294 19	
Total freight department earnings .....		468,294 19
Per train mile .....	\$0 96	
Per mile of road .....	1,129 81	
Total transportation earnings, entire line .....		\$699,084 70
Transportation earnings per mile of road, average 408.57 miles .....	\$1,666 62	
Transportation earnings per train mile .....	71	
Miscellaneous receipts from operating account, other than for transportation, as follows:		
From car mileage balance .....	\$7,310 62	
From other sources .....	691 04	
Total .....		8,001 66
Total earnings from operation of road .....		\$707,086 36
Total earnings per mile of road, average 408.57 miles .....	\$1,730 64	
Total earnings per train mile, 980.857 miles .....	72	
Proportion of taxable earnings for Michigan .....	320,081 08	
Total taxable earnings per mile of road in Michigan .....	1,730 64	
Total income from all sources .....		\$707,086 36
Proportion of income for Michigan .....		320,081 08

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway.....	\$78,292 34
Renewals of rails.....	107 38
Renewals of ties.....	38,579 97
Repairs and renewals of bridges and culverts.....	18,262 14
Repairs and renewals of fences, road crossings, signs and cattle guards.....	5,379 75
Repairs and renewals of buildings and fixtures.....	7,965 77
Repairs and renewals of telegraph.....	1,575 88
Stationery and printing.....	74 10
Total.....	<u>\$140,237 33</u>

## MAINTENANCE OF EQUIPMENT.

Superintendence.....	\$9,707 08
Repairs and renewals of locomotives.....	37,567 23
Repairs and renewals of passenger cars.....	10,510 38
Repairs and renewals of freight cars.....	42,991 65
Repairs and renewals of work cars.....	558 13
Repairs and renewals of shop, machinery and tools.....	1,921 77
Stationery and printing.....	341 50
Total.....	<u>\$103,597 64</u>

## CONDUCTING TRANSPORTATION.

Superintendence.....	\$18,616 32
Engine and roundhouse men.....	61,171 53
Fuel for locomotives.....	65,871 23
Water supply for locomotives.....	4,399 49
Oil, tallow and waste for locomotives.....	2,278 13
Other supplies for locomotives.....	670 89
Train service.....	45,041 34
Train supplies and expenses.....	5,308 95
Switchmen, flagmen and watchmen.....	11,531 22
Telegraph expenses.....	22,063 19
Station service.....	40,629 10
Station supplies.....	3,301 08
Switching charges—balance.....	21,136 05
Car mileage—balance.....	880 43
Loss and damage.....	2,990 88
Injuries to persons.....	993 53
Clearing wrecks.....	1,422 42
Advertising.....	3,296 48
Outside agencies.....	10,908 49
Commissions.....	251 44
Rent of buildings and other property.....	2,205 20
Stationery and printing.....	7,363 30
Total.....	<u>\$382,348 64</u>

## GENERAL EXPENSES.

Salaries of general officers.....	\$9,813 40
Salaries of clerks and attendants.....	9,080 35
General office expenses and supplies.....	3,253 07
Insurance.....	658 50
Law expenses.....	4,721 97
Stationery and printing (general offices).....	1,191 44
Other expenses.....	690 88
Taxes.....	31,365 35
Total.....	<u>\$60,784 96</u>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	22 02	\$140,237 33
Maintenance of equipment.....	16 26	103,597 64
Conducting transportation.....	52 18	382,348 64
General expenses, including taxes.....	9 54	60,784 96
Total operating expenses and taxes.....	100 00	<u>\$636,968 57</u>
Operating expenses and taxes per mile of road.....		1,559 01
Operating expenses and taxes per train mile run for trains earning revenue.....		65
Proportion of operating expenses and taxes for Michigan, main line.....		<u>288,340 38</u>
Total proportion of expenses for Michigan.....		<u>\$288,340 38</u>
Per centage of expenses to earnings.....	90 08	
Net earnings per mile of road.....		171 68
Net earnings per train mile.....		<u>07</u>



## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Dundee, Mich., to Allegan, Mich., November 29, 1888.

From Addison Junction, Mich., to C. C. C. & St. L. Jct., Ohio, July 10, 1890.

Leased:

From Addison Junction, Mich., to Jackson, Mich., April 25, 1896.

Branches:

From Lewisburg, Ohio, to Quarries, 1887.

From Germantown, Ohio, to Distillery, 1887.

## MAIN LINE.

	Miles.	Miles.
In Michigan, from Dundee to Allegan.....	133	
In Michigan from Addison Junction to State Line.....	22.18	
In Ohio from State Line to C. C. C. & St. L. Jct.....	165.33	
Total length completed.....		320.50

## BRANCHES.

Euphemis from Lewisburg to Quarries.....	1.4	
Mud Lick from Germantown to Rohrer's.....	1.8	
Total length of branches owned by company.....		3.20
Total length of road belonging to this company.....		323.70
Total length of road belonging to this company in Michigan.....	155.18	
Aggregate length in Michigan of sidings, spurs and other tracks not above enumerated.....	19.22	
Aggregate length of tracks in Michigan belonging to this company, computed as single track.....		174.40

Gauge of track, 4 feet 8½ inches.

## Proprietary or leased roads operated by this company.

Name, description and length of each:	Total miles.	In Michigan.
W. & L. E. R'y—Toledo to Manhattan Junction.....	2.1	
Ann Arbor R'y—Toledo to Dundee.....	22.9	17.00
J. & O. R'y—Addison Junction to Jackson.....	17.65	17.65
L. S. & M. S. R'y—Jackson terminal.....	1.04	1.04
C. C. C. & St. L. R'y—Franklin to Middletown.....	5.68	
M. & C. R'y—Middletown to Hageman.....	10.51	
C. L. & N. R'y—Hageman to Cincinnati.....	24.90	
B. & O. S. W.—East Norwood to Cincinnati.....	6.01	
Total.....	90.79	35.69
Total miles operated by company.....	414.49	190.87

## Number of bridges and trestles in Michigan.

	Number.	Aggregate length, feet.
Wooden.....	1	144
Iron.....	1	59
Wooden trestles.....	177	15,990
Total.....	179	16,193

## Crossings.—Railroad and Highway.

What railroads cross your road at grade in this State, and at what locality?

Wabash R. R. at Britton.

L. S. & M. S. R. R. at Tecumseh, Hanover, Homer and Allegan.

Michigan Central R. R. at Homer and Battle Creek.

Chicago & Grand Trunk R. R. at Battle Creek.

Chicago, Kalamazoo & Saginaw R. R. at Kalamazoo Junction.

Grand Rapids and Indiana R. R. at Monteth.

What railroads cross your road either over or under your grade in this State, and where?

Over:

L. S. & M. S. R. R. at Jerome and Hudson.

Under:

Michigan Central R. R. at Augusta.

L. S. & M. S. R. R. at Woodstock.

At what crossings are interlocking and derailing switches in operation?

Chicago, Kalamazoo & Saginaw R'y at Kalamazoo Junction.

Michigan Central R'y at Battle Creek and Homer.

L. S. & M. S. R'y at Homer.

Number of crossings of highways at grade in this State.....

206

Number of crossings of highways at grade in this State at which there are gates or

flagmen.....

4

Number of crossings of highways over or under railroad: over, 2; under, 6.....	8
Number of highway bridges 18 feet above track.....	2
Have safety guards been erected at overhead obstructions? Yes.	

Are your frogs and guard rails blocked as required by act 174, session laws of 1883.  
Yes.

How are they treated?  
Wooden blocks.

#### Stations.

Number of stations on whole line .....	83
Same in Michigan .....	37

#### Employees.

Number of persons regularly employed on all roads operated by company, including officials .....	817
Same in Michigan .....	299

Classify your employes as per following list:

	Number.
Baggagemen .....	12
Brakemen .....	51
Conductors .....	26
Engineers .....	33
Firemen .....	33
Laborers .....	245
Shopmen .....	186
Yardmen .....	5
Others .....	226

#### REPAIRS AND RENEWALS.

##### Fencing in Michigan.

How many miles of fencing have you .....	330.87
------------------------------------------	--------

Give the number of miles required to complete fence both sides of your track in Michigan, and the counties in which needed:  
Lenawee county, 1 11-100 miles.

##### Road bed and track.

Number of track sections in Michigan .....	27
Average length of sections, miles .....	6 4-10
Average number of men in each section gang .....	3
Number of new ties put in whole line during the year .....	112,318
Number of new ties put in track in Michigan .....	37,370
Average number of new ties per mile of road .....	329
New rails put in track:	
Steel (tons 343.365) miles .....	3.774

##### Bridges and culverts.

Amount of trestle work replaced with earth during the year (linear feet) .....	1,473
Timber culverts replaced during the year .....	5
With iron pipe,—number .....	1
With sewer pipe,—number .....	4

#### ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender .....	33	\$99,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender .....	1	2,000 00
Total .....	34	\$101,000 00
Number of passenger cars—12-wheel, including official cars .....	1	\$2,000 00
Number of passenger cars—8-wheel, including official cars .....	25	49,000 00
Number of express and baggage cars .....	6	7,200 00
Number of box freight cars .....	1,044	208,800 00
Number of stock cars .....	18	1,800 00
Number of platform cars .....	231	29,150 00
Number of coal cars .....	111	16,650 00
Number of conductors' way cars .....	14	5,600 00
Other cars as follows:		
Steam shovels .....	2	4,000 00
Derrick .....	1	1,500 00
Total .....	1,453	\$325,700 00
Number of locomotives equipped with power brakes .....		34
Number of passenger train cars equipped with power brakes .....		31

What patterns of power brakes have you in use, and number of locomotives and cars with each?

New York air, 12 locomotives, 8 cars.

Westinghouse air, 10 locomotives, 23 cars.

James vacuum, 2 locomotives.

American steam, 10 locomotives.

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?

Yes.

What pattern or patterns have you adopted for use?

Janney.

How are your passenger cars heated?

Steam, 30; Baker heater, 1.

### MILEAGE, TRAFFIC, ETC.

#### Train mileage.

	Entire lines. In Michigan.	
Miles run by passenger trains during the year.....	465,372	210,668
Miles run by freight trains during the year.....	401,623	181,805
Miles run by mixed trains.....	118,862	51,542
Total mileage of trains earning revenue.....	985,857	444,010

#### Passenger traffic.—Entire lines.

	Number.	Miles.	Rate.
Number of through passengers carried, earning revenue.....	16,742		
Number of local passengers carried, earning revenue.....	317,331		
Total number of passengers carried, earning revenue.....	334,073		
Number of passengers carried one mile.....	8,812,476		
Average distance carried.....		26.38	
Average amount received from each passenger.....			\$0 51.17
Average receipts per mile for through passengers.....			02.08
Average receipts per mile for local passengers.....			01.93
Average receipts per passenger per mile for all passengers.....			01.94

#### Passenger traffic.—In State of Michigan

Number of through passengers carried, earning revenue.....	7,578		
Number of local passengers carried, earning revenue.....	143,648		
Total number of passengers carried, earning revenue.....	151,226		
Number of passengers carried one mile.....	3,989,196		
Average distance carried.....		26.38	
Average amount received from each passenger.....			\$0 51.17
Average receipts per mile for through passengers.....			02.08
Average receipts per mile for local passengers.....			01.93
Average receipts per passenger per mile for all passengers.....			01.94

#### Freight traffic.—Entire lines.

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	135,880		
Number of tons of local freight carried, earning revenue.....	519,978		
Total tons of freight carried earning revenue.....	655,858		
Total mileage of through freight.....	12,699,086		
Total mileage of local freight.....	53,018,589		
Total freight mileage or tons carried one mile.....	65,717,675		
Average ton haul for through freight.....		93.5	
Average ton haul for local freight.....		102.0	
Average ton haul for all freight.....		100.2	
Average amount received for each ton haul.....			\$0 71
Average receipts ton per mile for through freight.....			00.614
Average receipts ton per mile for local freight.....			00.736
Average receipts ton per mile for all freight.....			00.713

## MICHIGAN RAILROAD RETURNS, 1896.

*Freight traffic.—In State of Michigan.*

Number of tons of through freight carried, earning revenue .....	61,510	
Number of tons of local freight carried, earning revenue .....	285,331	
Total tons of freight carried, earning revenue .....	346,841	
Total mileage of through freight .....	5,748,571	
Total mileage of local freight .....	24,000,243	
Total freight mileage or tons carried one mile .....	29,748,814	
Average ton haul for through freight .....	88.5	
Average ton haul for local freight .....	102.0	
Average ton haul for all freight .....	100.2	
Average amount received for each ton haul .....		\$0 71
Average receipts ton per mile, for through freight .....		00.614
Average receipts ton per mile for local freight .....		00.736
Average receipts ton per mile, for all freight .....		00.713

## FREIGHT TRAFFIC MOVEMENT.—ENTIRE LINES.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain .....	46,928	6,930	53,848	8.21
Flour .....	3,404	1,798	4,197	.79
Other mill products .....	3,033	1,444	4,477	.68
Hay .....	26,982	1,561	28,543	4.35
Tobacco .....	3,849	2,319	6,168	.94
Cotton .....		915	915	.14
Fruit and vegetables .....	4,900	4,390	9,290	1.42
<b>Products of animals:</b>				
Live stock .....	13,362	491	13,853	2.11
Dressed meats .....	38	39	75	.01
Other packing house products .....	1,240	4,696	6,906	.90
Poultry, game and fish .....	583	45	630	.10
Wool .....	288	14	297	.05
Hides and leather .....	125	44	169	.03
<b>Products of mines:</b>				
Anthracite coal .....	351	23,253	23,604	3.80
Bituminous coal .....	2,692	246,982	249,674	38.07
Coke .....	3	717	720	.11
Ores .....		17	17	.00
Stone, sand, and other like articles .....	17,106	4,828	21,934	3.34
Salt .....	201	2,255	2,456	.37
<b>Products of forest:</b>				
Lumber .....	12,754	33,528	46,282	7.08
Other than lumber .....	30,877	9,078	39,955	6.09
<b>Manufactures:</b>				
Petroleum and other oils .....	2,068	4,720	6,808	1.04
Sugar .....	816	3,883	4,649	.70
Iron, pig and bloom .....	301	17,714	18,015	2.75
Iron and steel rails .....	108	1,131	1,239	.19
Other castings and machinery .....	4,737	8,575	13,312	2.03
Cement, brick and lime .....	879	8,068	8,947	1.36
Agricultural implements .....	370	1,137	1,507	.23
Wagons, carriages, tools, etc. ....	556	282	818	.13
Wines, liquors and beers .....	4,090	1,707	5,797	.88
Household goods and furniture .....	1,457	1,477	2,934	.45
<b>Merchandise</b> .....	11,066	10,214	21,280	3.25
Ice .....	22,384	125	22,509	3.43
<b>Miscellaneous:</b>				
Other commodities not mentioned above. ....	9,150	24,883	34,033	5.19
<b>Total tonnage</b> .....	226,713	429,145	655,858	100.00

## FREIGHT TRAFFIC MOVEMENT.—IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight received from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	21,243	3,133	24,376	8.21
Flour.....	1,541	812	2,353	.79
Other mill products.....	1,373	633	2,026	.68
Hay.....	12,214	706	12,920	4.35
Tobacco.....	1,742	1,050	2,792	.94
Cotton.....		414	414	.14
Fruit and vegetables.....	2,218	1,987	4,205	1.42
<b>Products of animals:</b>				
Live stock.....	6,049	222	6,271	2.11
Dressed meats.....	16	18	34	.01
Other packing house products.....	561	2,112	2,673	.90
Poultry, game and fish.....	296	20	286	.10
Wool.....	123	6	134	.05
Hides and leather.....	57	20	77	.03
<b>Products of mines:</b>				
Anthracite coal.....	159	10,526	10,685	3.80
Bituminous coal.....	1,219	111,803	113,022	38.07
Coke.....	1	324	325	.11
Ores.....		8	8	
Stone, sand, and other like articles.....	7,743	2,186	9,929	3.34
Salt.....	91	1,021	1,112	.37
<b>Products of forest:</b>				
Lumber.....	5,773	15,177	20,950	7.06
Other than lumber.....	13,977	4,109	18,086	6.09
<b>Manufactures:</b>				
Petroleum and other oils.....	945	2,137	3,082	1.04
Sugar.....	369	1,735	2,104	.70
Iron, pig and bloom.....	136	8,019	8,155	2.75
Iron and steel rails.....	49	512	561	.19
Other castings and machinery.....	2,144	3,882	6,026	2.03
Cement, brick and lime.....	393	3,650	4,043	1.36
Agricultural implements.....	168	515	683	.23
Wagons, carriages, tools, etc.....	252	119	371	.13
Wines, liquors and beers.....	1,651	773	2,424	.83
Household goods and furniture.....	660	699	1,329	.45
<b>Merchandise.....</b>	<b>5,009</b>	<b>4,625</b>	<b>9,634</b>	<b>3.25</b>
<b>Miscellaneous:</b>				
Ice.....	10,133	57	10,190	3.43
Other commodities not mentioned above.....	4,142	11,263	15,405	5.19
<b>Total tonnage.....</b>	<b>102,627</b>	<b>194,263</b>	<b>296,890</b>	<b>100.00</b>

## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Co. Fixed sum per month. General express business. Freight taken at depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
 338.15 miles; Western Union Telegraph Company.

## TRANSPORTATION COMPANIES.

*Sleeping, drawing-room and palace car companies.*

What sleeping, drawing-room, chair or other palace passenger cars, not the exclusive property of your own or some other railroad company, have, during the year, been in use on your road in the State of Michigan, and on what terms? If rented by you, or allowed mileage between local points in this State, what was the amount paid for the use of such cars during the period under report?

Pullman Palace Car Co., Chicago, Ill., mileage..... \$148 67

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

## KILLED.

August 31, Mrs. M. L. Turner, Rea. Stepped in front of engine; carelessness.

## INJURED.

January 4, A. M. West, brakeman, near Eckford. Fell from car; carelessness.  
 November 9, W. H. Smith, unknown, Marshall. Walking on track; trespassing.  
 December 1, H. G. Williamson, unknown, Jackson. Highway collision; accidental.  
 December 21, Wm. Glynn, brakeman, Addison. Coupling; carelessness.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....					1	1
Falling from trains.....					1	
Trespassers on tracks.....			1			1
Total.....			1		2	2

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year..... 1  
 Number of persons injured during the year..... 4  
 Number of casualties purely accidental..... 1  
 Number resulting from lack of caution, carelessness or misconduct..... 2  
 Trespassers and tramps killed or injured..... 1

## CLASSIFICATION OF EMPLOYÉS.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....		2	2
Not classified above.....	1	2	3
Total.....	1	4	5

STATE OF OHIO, } ss.  
 COUNTY OF LUCAS, }

Frank B. Drake, receiver, and W. F. Booth, auditor, of the Cincinnati, Jackson and Mackinaw Railway being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.  
 [L. S. OF R. R.] Signed,

FRANK B. DRAKE, Receiver.  
 W. F. BOOTH, Auditor.

Subscribed and sworn to before me this 10th day of May, A. D. 1897.  
 [L. S.]

B. A. HAYES.  
 Notary Public, Lucas County, Ohio.

ANNUAL REPORT  
OF THE  
CINCINNATI, SAGINAW & MACKINAW RAILWAY COMPANY,

*For the year ending December 31, 1896.*

[Filed March 27, 1897.]

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OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President, A. W. WRIGHT, Alma, Michigan.*  
*Vice President and General Manager, CHARLES M. HAYS, Montreal, Province of Quebec.*  
*Secretary and Treasurer, JAMES H. MUIR, Detroit, Michigan.*  
*General Superintendent F. H. McQUIGAN, Montreal, Province of Quebec.*  
*Superintendent, A. B. ATWATER, Detroit, Michigan.*  
*Superintendent of Motive Power, F. W. MORSE, Montreal, Province of Quebec.*  
*Superintendent of Car Department, W. McWOOD, Montreal, Province of Quebec.*  
*Master Mechanic, HERBERT ROBERTS, Fort Gratiot, Michigan.*  
*Master Car Builder, THOMAS SUTHERLAND, Fort Gratiot, Michigan.*  
*Chief Engineer, JOSEPH HOBSON, Montreal, Province of Quebec.*  
*Assistant Engineer, GEORGE MASSON, Detroit, Michigan.*  
*General Traffic Manager, GEORGE B. REEVE, Montreal, Province of Quebec.*  
*General Passenger and Ticket Agent, W. E. DAVIS, Montreal, Province of Quebec.*  
*Assistant General Passenger and Ticket Agent, E. H. HUGHES, Chicago, Illinois.*  
*General Freight Agent, JOHN W. LOUD, Montreal, Province of Quebec.*  
*First Assistant General Freight Agent, DAVID BROWN, Chicago, Illinois.*  
*Solicitor, E. W. MEDDAUGH, Detroit, Michigan.*

DIRECTORS.

A. W. WRIGHT, Alma, Michigan.  
CHARLES M. HAYS, Montreal, Province of Quebec.  
W. R. BURT, Saginaw, Michigan.  
G. M. STARK, Saginaw, Michigan.  
E. W. MEDDAUGH, Detroit, Michigan.  
A. B. ATWATER, Detroit, Michigan.  
S. O. FISHER, West Bay City, Michigan.  
Terms expire April 15, 1897, or when successors are appointed.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: December 30, 1889 (dated December 26, 1889).  
Number of stockholders at date of last election: 11.  
Number of stockholders in Michigan at same date: 8.  
Amount of full paid stock held in Michigan at same date: \$676,500.  
Date of annual meeting of stockholders: The day after the second Wednesday in April.  
Fiscal year of company ends December 31.  
General offices of the company are located at Detroit and Saginaw (E. S.), Michigan.

## MICHIGAN RAILROAD RETURNS, 1896.

## GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$128,855 35
Total expenses, including taxes.....	\$124,247 06	
Net income.....		\$4,608 29
Interest on funded debt.....	86,250 00	
Balance for the year.....	\$81,641 71	
Balance (loss) from December 31, 1895.....	46,053 44	
Items not included in above, as follows:		
Advances by the Chicago & Grand Trunk Railway Company and the Grand Trunk Railway Company of Canada, under traffic agreement, dated October 2, 1890.....		\$7,855 28
Balance forward to next year.....		69,869 87
	<u>\$127,725 15</u>	<u>\$127,725 15</u>

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$5,000,000 00
Par value of shares.....	\$100 00	
Number of shares issued.....	15,000	
Amount paid in on common.....	\$1,500,000 00	
Total amount paid in, as per books of the company.....		1,500,000 00
Paid in per mile of road owned by company, 53 miles.....		<u>28,801 89</u>

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage bonds, issued 1st January, 1890.....	5%	1st Jan. 1920....	New York.....	\$1,725,000 00

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated.	Amount.
For miscellaneous.....		\$279,924 51

## RECAPITULATION.

Total funded debt.....	\$1,725,000 00
Total unfunded debt.....	279,924 51
Total debt liabilities.....	<u>\$2,004,924 51</u>
Amount of debt liabilities per mile of road, 53 miles.....	37,828 76
Total amount of stock and debt.....	3,504,924 51
Stock and debt per mile of road, 53 miles.....	<u>66,130 65</u>

## GENERAL BALANCE SHEET.—Dr.

Construction and equipment account.....	\$3,228,827 58
Cash items:	
Cash.....	\$33,075 69
Due from agents.....	3,810 75
	36,886 44
Other assets:	
Debit balances from companies and individuals.....	9,016 36
Chicago & Grand Trunk Railway Company for Cincinnati, Saginaw & Mackinaw railroad interest coupons pledged as security for advances under traffic agreement.....	\$108,452 94
Grand Trunk Railroad Company of Canada for ditto.....	51,871 82
	160,324 26
Loss or income account.....	69,869 87
Total.....	<u>\$3,504,924 51</u>



# CINCINNATI, SAGINAW & MACKINAW RAILWAY COMPANY. 133

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$1,500,000 00	
Funded debt.....	1,725,000 00	
		\$3,225,000 00
Unfunded debt:		
Interest unpaid.....	\$69,869 87	
Vouchers and accounts.....	49,730 38	
Other liabilities (list as follows):		
Chicago & Grand Trunk Railway Co. for advances under traffic agreement.	108,452 94	
Grand Trunk Railway Co. of Canada, ditto.....	51,871 32	
		279,924 51
Total.....		<u>\$3,504,924 51</u>

## COST OF ROAD AND EQUIPMENT.

### PURCHASED BY PRESENT COMPANY.

When purchased: 1st November, 1890.		
Original cost to present company, of road and equipment.....	\$3,180,000 00	
Amount expended since purchase, account of construction.....	46,067 58	
Amount expended since purchase, account of equipment.....	2,760 00	
Total cost to date of report.....		<u>\$3,228,827 58</u>
Average cost per mile of road (not including sidings), 53 miles.....	60,921 28	
Proportion of cost for Michigan.....	3,228,827 58	

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

### MAIN LINE.

Extensions and new sidings.....	\$8,955 61	
New buildings.....	1,452 71	
Total.....		<u>\$10,408 32</u>
Total charges to property account as above.....	10,408 32	
Net addition to property account.....	10,408 32	

## ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

### PASSENGER EARNINGS.

Main line and branches:		
Local fares.....	\$27,230 22	
Through fares.....	7,423 99	
Total passenger fares.....		<u>\$34,653 21</u>
Express and baggage.....	1,869 87	
Mails.....	4,166 33	
Total passenger department earnings.....		<u>\$40,689 41</u>
Per train mile.....	\$0 62	
Per mile of road.....	767 72	

### FREIGHT EARNINGS.

Main line and branches:		
Local traffic.....	\$63,757 01	
Through traffic.....	23,931 20	
Total traffic.....		<u>\$87,688 21</u>
Total freight department earnings.....		<u>87,688 21</u>
Per train mile.....	\$2 08	
Per mile of road.....	1,654 49	
Total transportation earnings, entire line.....		<u>\$128,377 62</u>
Transportation earnings per mile of road.....	\$2,422 22	
Transportation earnings per train mile.....	1 18	
Miscellaneous receipts from operating account, other than for transportation, as follows:		
From telegraph companies.....	164 60	
From rents not otherwise provided for.....	813 13	
Total.....		<u>477 73</u>

Total earnings from operation of road.....		\$128,855 35
Total earnings per mile of road.....	\$2,431 23	
Total earnings per train mile.....	1 13	
Proportion of taxable earnings for Michigan.....		128,855 35
Total taxable earnings per mile of road in Michigan.....		2,431 23
Total income from all sources.....		128,855 35
Proportion of income for Michigan.....		128,855 35

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway.....	\$15,385 53
Renewals of rails.....	450 00
Renewals of ties.....	9,385 45
Repairs and renewals of bridges and culverts.....	2,354 81
Repairs and renewals of fences, road crossings, signs and cattle guards.....	568 92
Repairs and renewals of buildings and fixtures.....	1,817 37
Repairs and renewals of docks and wharves.....	726 36
Stationery and printing.....	54 06
Total.....	\$30,742 50

## MAINTENANCE OF EQUIPMENT.

Superintendence.....	\$390 43
Repairs and renewals of locomotives.....	8,513 75
Repairs and renewals of passenger cars.....	5,761 18
Repairs and renewals of freight cars.....	3,788 43
Repairs and renewals of work cars.....	50 00
Repairs and renewals of shop machinery and tools.....	460 68
Stationery and printing.....	78 40
Other expenses.....	120 73
Total.....	\$19,103 60

## CONDUCTING TRANSPORTATION.

Superintendence.....	\$3,210 20
Engine and roundhouse men.....	14,808 71
Fuel for locomotives.....	9,587 08
Water supply for locomotives.....	676 08
Oil, tallow and waste for locomotives.....	574 71
Train service.....	4,800 73
Train supplies and expenses.....	1,677 10
Switchmen, flagmen and watchmen.....	10,151 32
Telegraph expenses.....	2,195 12
Station service.....	13,915 93
Station supplies.....	1,512 04
Car mileage—balance.....	2,000 97
Loss and damage.....	272 86
Injuries to persons.....	157 84
Advertising.....	384 66
Outside agencies.....	1,385 30
Commissions.....	219 08
Stationery and printing.....	769 32
Total.....	\$68,299 05

## GENERAL EXPENSES.

Salaries of general officers.....	\$433 66
Salaries of clerks and attendants.....	850 21
General office expenses and supplies.....	600 17
Insurance.....	715 93
Law expenses.....	644 44
Stationery and printing (general offices).....	82 50
Taxes.....	2,775 00
Total.....	\$6,101 91

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	24.74	\$30,742 50
Maintenance of equipment.....	15.38	19,103 60
Conducting transportation.....	54.97	68,299 05
General expenses, including taxes.....	4.91	6,101 91
Total operating expenses and taxes.....	100.00	\$124,247 06

# CINCINNATI, SAGINAW & MACKINAW RAILWAY COMPANY. 135

Operating expenses and taxes per mile of road .....	\$2,344 28	
Operating expenses and taxes per train mile run, for trains, earning revenue, 109.048 miles .....	1 14	
Proportion of operating expenses and taxes for Michigan, main line .....		\$124,247 06
Total proportion of expenses for Michigan .....		\$124,247 06
Percentage of expenses to earnings, 96.42.		
Net earnings per mile of road .....		86 95
Net earnings per train mile .....	.04	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Durand, Michigan, to West Bay City, Michigan, 11th January, 1890.

### MAIN LINE.

	Miles.
In Michigan, from Durand to West Bay City .....	53.00
Total length completed .....	53.00
Total length of road belonging to this company in Michigan .....	53.00
Aggregate length in Michigan of sidings, spurs and other tracks not above enumerated .....	32.64
Aggregate length of tracks in Michigan belonging to this company, computed as single track .....	85.64
Gauge of track, 4 feet 8½ inches.	

### Number of bridges and trestles in Michigan.

	Number.	Aggregate length, feet.
Wooden bridges .....	1	299
Iron bridges .....	3	92
Combination bridges .....	2	281
Wooden trestles .....	30	3,506
Total .....	36	4,180

### Draw bridges in Michigan.

How many on your line?  
Three.

Where located, when built and length of draw span?  
One at Saginaw river, built in 1889; length of draw span, 194 feet.  
One two miles north of Batchelder's, built in 1889, 88 feet long.  
One three miles south of West Bay City, built in 1889, 88 feet long.

Character of structure?  
Truss.

Material of which constructed.  
One stone and iron, 2 of wood.

Height above water, and depth of water under bridge.  
20 feet and 12 feet respectively.

How swung, by engine or hand power?  
Hand power.

Approaches straight or curved?  
Curved.

Do you require all trains to come to full stop before crossing a draw, and how are they signaled?  
Yes. Signaled by semaphores.

### Crossings.—Railroad and highway.

What railroads cross your road at grade in this State, and at what locality?  
Flint & Pere Marquette R. R. at Maple street, Saginaw, E. S.; at South Saginaw (Belt line); at  
Saginaw, E. S. (Dead line); at north of river bridge, Saginaw, E. S.; and at Mershon's.  
Michigan Central R. R. at Emerson street, Saginaw, E. S.; at north of river bridge, Saginaw, E. S.;  
at Saginaw, E. S. (Wright's spur); and at Lafayette and Hart streets, West Bay City.

At what crossings are interlocking and derailing switches in operation?  
Three at Saginaw, E. S.; 3 at Saginaw, W. S.; 1 at Saginaw, S. S.; 1 at Mershon's; 2 at West Bay City.

What pattern or patterns have you adopted?  
Union Switch & Signal Company's.

Number of crossings of highways at grade in this State .....	96
Number of crossings of highways at grade in this State at which there are gates or flagmen .....	11

Have safety guards been erected at overhead obstructions?  
Yes.

Are your frogs and guard rails blocked as required by act 174, session laws of 1883?  
Yes.

How are they treated?  
Plank blocking.

*Stations.*

Number of stations on whole lines.....	21
Same in Michigan.....	21

*Employés.*

Number of persons regularly employed on all roads operated by company, including officials.....	124
Same in Michigan.....	124
Classify your employés as per following list:	Number.
Baggagemen.....	1
Brakemen.....	5
Conductors.....	2
Engineers.....	6
Firemen.....	7
Laborers.....	37
Shopmen.....	5
Yardmen.....	8
Others.....	53

REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you?.....	116
------------------------------------------	-----

*Road bed and track.*

Number of track sections in Michigan.....	8
Average lengths of sections, miles.....	6½
Average number of men in each section gang.....	4
Number of new ties put in whole line and sidings during the year.....	33,121
Number of new ties put in track and sidings in Michigan.....	33,121
Average number of new ties per mile of road and sidings.....	389

ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender.....	6	\$30,000 00
Total.....	6	\$30,000 00
Number of passenger cars—12-wheel, including official cars.....	1	\$3,500 00
Number of passenger cars—8-wheel, including official cars.....	11	30,000 00
Number of express and baggage cars.....	2	3,600 00
Number of box freight cars.....	30	11,550 00
Number of platform cars.....	65	13,520 00
Number of conductors' way cars.....	2	1,600 00
Other cars.....	1	500 00
Total.....	112	\$64,570 00
Number of locomotives equipped with power brakes.....	6	
Number of passenger-train cars equipped with power brakes.....	14	
Number of freight cars equipped with power brakes.....	1	

What patterns of power brakes have you in use, and number of locomotives and cars with each?

Locomotives with Westinghouse air brake, 3; locomotives with Eames' air brake, 3; cars with Westinghouse air brake, 15.

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 83, session laws of 1887?  
Yes.

What pattern or patterns have you adopted for use?  
Gould and Janney.

How are your passenger cars heated?  
Baker heater (hot water).

# CINCINNATI, SAGINAW & MACKINAW RAILWAY COMPANY. 137

## MILEAGE, TRAFFIC, ETC.

<i>Train mileage.</i>		<i>Entire lines. In Michigan.</i>	
Miles run by passenger trains during the year.....	65,021	65,021	
Miles run by freight trains during the year.....	40,466	40,466	
Miles run by mixed trains.....	3,561	3,561	
Total mileage of trains earning revenue.....	109,048	109,048	

<i>Passenger traffic.—Road all in State of Michigan.</i>			
	Number.	Miles.	Rate.
Number of through passengers carried, earning revenue.....	7,169		
Number of local passengers carried, earning revenue.....	57,033		
Total number of passengers carried, earning revenue.....	64,222		
Number of passengers carried one mile.....	1,569,335		
Average distance carried.....		24.4	
Average amount received from each passenger.....			\$0 53.96
Average receipts per mile for through passengers.....			01.85
Average receipts per mile for local passengers.....			02.29
Average receipts per passenger per mile for all passengers.....			02.21

<i>Freight traffic.—Road all in State of Michigan.</i>			
	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	40,134		
Number of tons of local freight carried, earning revenue.....	104,995		
Total tons of freight carried, earning revenue.....	145,129		
Total mileage of through freight.....	2,127,103		
Total mileage of local freight.....	3,192,675		
Total freight mileage or tons carried one mile.....	5,319,777		
Average ton haul for through freight.....		53.0	
Average ton haul for local freight.....		30.4	
Average ton haul for all freight.....		36.7	
Average amount received for each ton haul.....			\$0 60.42
Average receipts ton per mile, for through freight.....			01.13
Average receipts ton per mile, for local freight.....			02.00
Average receipts ton per mile, for all freight.....			01.65

## FREIGHT TRAFFIC MOVEMENT.—ROAD ALL IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	4,183	1,982	6,165	4.25
Flour.....	1,262	102	1,364	.94
Other mill products.....	281	—	281	.19
Hay.....	5,936	57	5,993	4.13
Tobacco.....	1	7	8	.01
Cotton.....	—	48	48	.03
Fruit and vegetables.....	1,281	290	1,571	1.06
Potatoes.....	180	—	180	.12
<b>Products of animals:</b>				
Live stock.....	1,174	108	1,282	.88
Dressed meats.....	32	420	452	.31
Other packing house products.....	245	—	245	.17
Poultry, game and fish.....	806	—	806	.56
Wool.....	52	—	52	.04
Hides and leather.....	28	115	143	.10
<b>Products of mines:</b>				
Anthracite coal.....	487	678	1,165	.80
Bituminous coal.....	1,860	1,672	3,532	2.43
Stone, sand and other like articles.....	12,685	2,129	14,814	10.21
Salt.....	20,160	144	20,304	13.99
<b>Products of forest:</b>				
Lumber.....	58,720	2,775	61,495	42.37
Logs.....	975	202	1,177	.81
Shingles.....	2,082	2,009	4,091	2.82
<b>Manufactures:</b>				
Petroleum and other oils.....	—	54	54	.04
Sugar.....	—	743	743	.51
Naval stores.....	—	81	81	.06
Iron, pig and bloom.....	251	127	378	.26
Iron and steel rails.....	436	1,446	1,882	1.30
Other castings and machinery.....	331	596	927	.64
Cement, brick and lime.....	1,387	180	1,567	1.08
Agricultural implements.....	—	200	200	.14
Wagons, carriages, tools, etc.....	—	60	60	.04
Wines, liquors and beers.....	48	114	162	.11
Household goods and furniture.....	148	171	319	.22
<b>Merchandise.....</b>	<b>3,807</b>	<b>4,252</b>	<b>8,059</b>	<b>5.55</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	3,968	1,541	5,529	3.81
<b>Total tonnage.....</b>	<b>122,826</b>	<b>22,303</b>	<b>145,129</b>	<b>100.00</b>

## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The National Express Company pays one and a half times the company's local first-class freight rates on all local merchandise; and for all produce and through business one and a fourth times the company's local first-class freight rates. The railway company takes freight at depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

Fifty-eight miles of wire belonging to the Cincinnati, Saginaw and Mackinaw R. R. Co.

# CINCINNATI, SAGINAW & MACKINAW RAILWAY COMPANY. 139

## TRANSPORTATION COMPANIES.

### *Sleeping, drawing-room and palace car companies.*

What sleeping, drawing-room, chair or other palace passenger cars, not the exclusive property of your own or some other railroad company, have during the year been in use on your road in the State of Michigan, and on what terms? If rented by you, or allowed mileage between local points in this State, what was the amount paid for the use of such cars during the period under report? \$2 34  
Wagner Palace Car Co., New York, N. Y. (allowed mileage) .....

### *Fast freight lines.*

To what fast freight lines, or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

Name of company.	General office.	Amount paid.
Armour Car Lines.....	Chicago, Ill.....	\$6 18
American Refrigerator Transit Co.....	St. Louis, Mo.....	29
Burton Stock Car Co.....	Boston, Mass.....	58
Chicago, Boston & Liverpool Refrigerator Line.....	St. Albans, Vt.....	99 59
Chicago Refrigerator Car Line.....	Chicago, Ill.....	6 29
Commerce Despatch Line.....	Indianapolis, Ind.....	3 67
Excelsior Horse Car Line.....	Chicago, Ill.....	62
Havens & Co., C. B.....	Omaha, Neb.....	32
Hicks' Stock Car Co.....	Chicago, Ill.....	64
International Fruit Dealers' Despatch.....	Chicago, Ill.....	90
I. E. B. Furniture Line.....	Atlanta, Ga.....	1 10
Kansas City Dressed Beef Line.....	Kansas City, Mo.....	78
Keystone Palace Horse Car Co.....	Chicago, Ill.....	24
Merchant's' Despatch Transportation Co.....	New York, N. Y.....	10 13
Morris Coal and Transportation Co.....	Cleveland, O.....	1 19
National Despatch Line.....	St. Albans, Vt.....	318 88
New York Despatch Refrigerator Line.....	Boston, Mass.....	159 89
New England Car Co.....	Boston, Mass.....	1 46
St. Louis Refrigerator Car Co.....	St. Louis, Mo.....	59
Southern Despatch Lumber Line.....	Louisville, Ky.....	47
Swift Refrigerator Line.....	Chicago, Ill.....	14 15
Union Refrigerator Transit Co.....	St. Louis, Mo.....	39
Total.....		\$628 35

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

### KILLED.

March 7, 1896, Peter Moim, citizen, Salzburg. Highway crossing. Inquest—"His carelessness."

STATE OF MICHIGAN, } ss.  
COUNTY OF WAYNE, }

Almon B. Atwater, superintendent, and James H. Muir, secretary and treasurer, of the Cincinnati, Saginaw & Mackinaw Railroad Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed, \*

A. B. ATWATER, Superintendent.

JAS. H. MUIR, Secretary and Treasurer.

Subscribed and sworn to before me this 26th day of March, A. D. 1897.

[L. S.]

LAWRENCE F. LANG,

Notary Public, Wayne County, Mich.

ANNUAL REPORT  
OF THE  
CLEVELAND, CINCINNATI, CHICAGO & ST. LOUIS RAILWAY  
COMPANY,

*For the year ending December 31, 1896.*

[Filed March 27, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, M. E. INGALLS, Cincinnati, Ohio.  
*Vice President*, J. D. LAYNG, New York.  
*Secretary*, E. F. OSBORN, Cincinnati, Ohio.  
*Auditor*, P. A. HEWITT, Cincinnati, Ohio.  
*Treasurer*, C. F. COX, New York.  
*General Manager*, C. E. SCHAFF, Cincinnati, Ohio.  
*General Superintendent*, J. Q. VAN WINKLE, Indianapolis, Ind.  
*Division Superintendent*, S. T. BLIZARD (Michigan Div.), Wabash, Ind.  
*Chief Engineer*, G. W. KITTREDGE, Cincinnati, Ohio.  
*Superintendent of Telegraph*, C. S. RHOADS, Indianapolis, Ind.  
*Local Treasurer*, F. D. COMSTOCK, Cincinnati, Ohio.  
*General Passenger Agent*, D. B. MARTIN, Cincinnati, Ohio.  
*General Freight Agent*, E. F. COST, Cincinnati, Ohio.  
*Attorney (General Counsel)*, JOHN T. DYE, Indianapolis, Ind.

DIRECTORS.

C. VANDERBILT, New York.  
W. K. VANDERBILT, New York.  
C. M. DEPEW, New York.  
J. P. MORGAN, New York.  
M. E. INGALLS, Cincinnati, Ohio.  
Terms expire October, 1897.  
JAMES BARNETT, Cleveland, Ohio.  
ALEX. McDONOLD, Cincinnati, Ohio.  
GEO. A. FARLOW, Boston, Mass.  
Terms expire October, 1898.  
GEO. T. BLISS, New York.  
H. MCK. TWOMBLY, New York.  
J. D. LAYNG, New York.  
F. W. VANDERBILT, New York.  
W. P. ANDERSON, Westerly, R. I.  
Terms expire October, 1899.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: Consolidated as C., C., C. & St. Louis R'y Co., June 27, 1889.  
Number of stockholders at date of last election: 2,642.  
Number of stockholders in Michigan at same date: 6.  
Amount of full paid stock held in Michigan at same date: 178 shares.  
Date of annual meeting of stockholders: Last Wednesday in October.  
Fiscal year of company ends June 30.  
General offices of the company are located at Cincinnati, Ohio.



CLEVELAND, CINCINNATI, CHICAGO & ST. LOUIS R'Y CO. 141

GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$18,011,462 62
Total expenses, including taxes.....	\$9,879,805 70	
Net income.....		\$8,131,656 92
Interest on funded debt.....	2,642,972 11	
Rentals of buildings, tracks, etc. (excluded above).....	199,982 90	
		2,842,955 01
Balance applicable to dividends.....		\$288,691 91
Dividends declared (5 per cent), preferred stock.....	\$500,000 00	
Balance for the year.....	211,308 09	
Balance (profit and loss) last year.....		454,802 37
Received from sundry balances, 7 accounts.....		7,792 90
Balance forward to next year.....		\$251,087 18

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association... { Common.....\$28,700,000 00 } \$38,700,000 00	
Par value of shares..... { Preferred.....10,000,000 00 }	\$100 00
Number of shares issued.....	379,873.35
Amount paid in on common.....	\$27,987,335 00
Amount paid in on preferred.....	10,000,000 00
C., S. & C. preferred stock and scrip assumed in consolidation.....	428,997 45
Total amount paid in as per books of the company.....	38,416,332 45
Paid in per mile of road owned by company, 1,804.74 miles.....	21,286 35

ANALYSIS OF DEBT ACCOUNTS.

FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
I. C. & L., mtge., Feb. 1, 1867.....	7%	Feb. 1, 1897.....	New York.....	\$379,000 00
C. L. & C., 1st mtge. June 1, 1871.....	7%	Sept. 1, 1901.....	New York.....	792,000 00
C., I., St. L. & C., 1st consol. mtge., March 8, 1890.....	6%	May 1, 1920.....	New York.....	717,000 00
C., I., St. L. & C., genl. 1st mtge., Aug. 2, 1896.....	4%	Aug. 1, 1936.....	New York.....	7,685,000 00
B. & I. R. R., 1st mtge., Jan. 1, 1864.....	7%	Jan. 1, 1899.....	New York.....	73,000 00
C., C., C. & I. R'y, 1st mtge., S. F., May 1, 1869.....	7%	May 1, 1899.....	New York.....	3,000,000 00
C., C., C. & I. R'y, 1st consol. mtge., June 1, 1874.....	7%	June 1, 1914.....	New York.....	4,138,000 00
C., C., C. & I. R'y, genl. consol. mtge., Jan. 1, 1884.....	6%	Jan. 1, 1934.....	New York.....	3,205,000 00
I. & St. L. R. R., 1st mtge., July 1, 1869.....	7%	July 1, 1919.....	New York.....	2,000,000 00
I. & St. L. R'y, 1st mtge., Nov. 1, 1882.....	6%	Nov. 1, 1912.....	New York.....	500,000 00
C. & S. R'y, 1st mtge., Feb. 22, 1871.....	7%	April 1, 1901.....	New York.....	2,000,000 00
C. & S. R'y, 2nd mtge., Jan. 1, 1872.....	7%	Jan. 1, 1902.....	New York.....	125,000 00
C., C., C. & St. L. R'y, (C., V. & C. R'y), 1st mtge., Jan. 1, 1890.....	4%	Jan. 1, 1939.....	New York.....	5,000,000 00
C., I. & C. R. R., 1st consol. mtg., Jan. 1, 1898.....	5%	Jan. 1, 1928.....	New York.....	2,571,000 00
C., C., C. & St. L. R'y, (S. & C. div.), mtge., Oct. 30, 1890.....	4%	Sept. 1, 1940.....	New York.....	1,103,780 00
C., C., C. & St. L. R'y, (W. W. V. div.) mtge., Nov. 1, 1890.....	4%	July 1, 1940.....	New York.....	650,000 00
C., C., C. & St. L. R'y, (St. L. div. 1st Cole trust) mtge., Nov. 1, 1890.....	4%	Nov. 1, 1990.....	New York.....	10,030,000 00
C., C., C. & St. L. R'y, (C., W. & M. R'y div.) mtge., May 9, 1891.....	4%	July 1, 1991.....	New York.....	4,000,000 00
C., C., C. & St. L. R'y, genl. mtge. bonds, June 1, 1893.....	4%	June 1, 1993.....	New York.....	7,000,000 00
Colo., Sp. & Cin. R. R., 1st mtge. bonds, Sept. 1, 1871.....	5%	Sept. 1, 1901.....	New York.....	78,000 00
Total funded debt.....				\$55,016,780 00

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For equipment .....	To be paid in cash .....	\$546,344 66
For miscellaneous .....	To be paid in cash .....	878,899 31
For current balances .....	To be paid in cash .....	3,169,317 39
Total unfunded debt .....		\$4,594,561 36

## RECAPITULATION.

Total funded debt .....	\$55,016,730 00
Total unfunded debt .....	4,594,561 36
Total debt liabilities .....	\$59,611,291 36
Amount of debt liabilities per mile of road, 1,804.74 miles .....	33,080 40
Total amount of stock and debt .....	98,028,123 81
Stock and debt per mile of road, 1,804.74 miles .....	54,317 03

## GENERAL BALANCE SHEET—Dr.

Construction and equipment accounts .....	\$35,861,368 27
Other investments:	
Bonds owned .....	3,744,230 00
Stock owned .....	975,360 67
Investments in and advances to branch lines .....	4,680,973 03
Real estate, etc. ....	124,368 00
Cash items:	
Cash .....	\$1,318,287 79
Bills receivable .....	11,320 69
Due from agents .....	170,222 15
Other assets:	
Materials and supplies .....	\$396,682 44
Sinking funds .....	323,453 17
Debit balances from companies and individuals .....	662,994 76
Total .....	\$98,279,210 99

## GENERAL BALANCE SHEET—Cr.

Capital stock .....	\$38,416,832 45
Funded debt .....	55,016,730 00
Unfunded debt:	
Interest unpaid .....	\$457,208 75
Dividends unpaid .....	132,494 64
Notes payable .....	509,225 00
Vouchers and accounts .....	2,070,391 00
Other liabilities (list as follows):	
Accrued interest on bonds not due .....	\$438,899 31
Equipment notes .....	546,344 66
Other deferred liabilities .....	440,000 00
Profit and loss or income accounts .....	1,425,243 97
Total .....	\$98,279,210 99

## COST OF ROAD AND EQUIPMENT.

*Purchased by present company.*

When purchased: Consolidated June 27, 1889.	
Original cost to present company, of road and equipment .....	\$45,303,500 39
Amount expended since consolidation account of equipment and additional roads acquired by purchase and consolidation since June 27, 1889 .....	40,537,887 88
Total cost to date of report .....	85,861,388 27
Average cost per mile of road (not including sidings) 1,804.74 miles .....	47,575 47
Proportion of cost for Michigan .....	1,671,720 84

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Extensions and new sidings .....	\$150,938 12
New buildings .....	50,145 85
C., S. & C. bonds assumed .....	78,000 00
Stock issued .....	500 00
Discount on bonds sold .....	200,000 00
Total charges .....	\$479,584 08
Total charges to property account as above .....	479,584 08
Net addition to property account .....	479,584 08

## ANALYSIS OF EARNINGS.—IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

Main line and branches:		
Local fares .....	\$28,427 80	
Through fares .....	4,895 98	
Total passenger fares .....	\$33,323 28	
Express and baggage .....	2,031 08	
Mails .....	2,929 42	
Total passenger department earnings .....		\$38,083 73
Per train mile .....	\$0 66	
Per mile of road .....	1,063 77	

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic .....	\$40,192 49	
Through traffic .....	52,488 80	
Total freight department earnings .....		92,680 99
Per train mile .....	\$1 44	
Per mile of road .....	2,634 47	

## ANALYSIS OF EARNINGS.—ENTIRE LINES.

## PASSENGER EARNINGS.

Main line and branches:		
Local fares .....	\$2,847,275 61	
Through fares .....	980,753 75	
Total passenger fares .....	\$3,828,029 36	
Express and baggage .....	\$358,488 26	
Mails .....	532,178 14	
Total passenger department earnings .....		4,718,675 76
Per train mile .....	\$0 83	
Per mile of road .....	2,587 13	

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic .....	\$3,482,419 56	
Through traffic .....	4,544,894 34	
Total traffic .....	\$8,026,813 90	
Total freight department earnings .....		8,026,813 90
Per train mile .....	\$1 28	
Per mile of road .....	4,366 88	
Total transportation earnings, entire line .....		\$12,745,489 66
Transportation earnings per mile of road .....	6,934 01	
Transportation earnings per train mile .....	1 07	
Miscellaneous receipts from operating account, other than for transportation, as follows:		
From rents of tracks, yards and terminals .....	\$165,469 84	
From rents not otherwise provided for .....	100,503 12	
		265,972 96
Total .....		\$13,011,462 62

Distribution of miscellaneous earnings between main line and leased or proprietary roads:

Company:	Total miscellaneous.	Proportion for Michigan.
C. C. C. & St. L. E'y Co.....	\$285,972 96	\$300 00
Total earnings from operation of road .....	\$13,011,462 62	
Total earnings per mile of road.....	7,078 71	
Total earnings per train mile .....	1 09	
Proportion of taxable earnings for Michigan .....		\$131,064 72
Total taxable earnings per mile of road in Michigan.....	3,729 78	
Total income from all sources.....	13,011,462 62	
Proportion of income for Michigan, actual .....		131,064 72

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway.....	\$300,461 70
Renewals of rails.....	117,919 90
Renewals of ties.....	317,358 31
Repairs and renewals of bridges and culverts.....	209,799 07
Repairs and renewals of fences, road crossings, signs and cattle guards .....	62,284 62
Repairs and renewals of buildings and fixtures.....	230,764 92
Repairs and renewals of docks and wharves.....	2,198 37
Repairs and renewals of telegraph.....	5,214 26
Stationery and printing.....	750 45
Total.....	\$1,746,751 60

## MAINTENANCE OF EQUIPMENT.

Superintendence.....	\$54,630 28
Repairs and renewals of locomotives.....	631,511 86
Repairs and renewals of passenger cars.....	204,339 90
Repairs and renewals of freight cars.....	579,378 77
Repairs and renewals of work cars.....	4,467 28
Repairs and renewals of shop machinery and tools.....	62,330 43
Stationery and printing.....	2,432 96
Total.....	\$1,539,091 33

## CONDUCTING TRANSPORTATION.

Superintendence.....	\$146,525 72
Engine and roundhouse men.....	944,695 16
Fuel for locomotives.....	789,375 04
Water supply for locomotives.....	63,762 82
Oil, tallow and waste for locomotives .....	28,543 75
Other supplies for locomotives .....	23,232 96
Train service.....	668,642 03
Train supplies and expenses.....	116,517 73
Switchmen, flagmen and watchmen.....	488,542 68
Telegraph expenses .....	160,703 57
Station service.....	1,081,428 08
Station supplies.....	52,790 38
Switching charges—balance.....	102,980 48
Car mileage—balance.....	302,270 17
Loss and damage.....	102,006 93
Injuries to persons.....	99,484 76
Clearing wrecks.....	10,334 52
Advertising.....	44,487 20
Outside agencies.....	262,781 25
Rents for tracks, yards and terminals.....	196,392 90
Rent of buildings and other property .....	3,600 00
Stationery and printing.....	66,170 78
Other expenses.....	4,718 60
Total.....	\$5,738,985 51

## GENERAL EXPENSES.

Salaries of general officers .....	\$83,432 50
Salaries of clerks and attendants .....	220,741 43
General office expenses and supplies .....	50,316 87
Insurance .....	48,083 36
Law expenses .....	45,354 51
Stationery and printing (general offices) .....	18,937 79
Other expenses .....	4,994 78
Taxes .....	588,106 98
<b>Total .....</b>	<b>\$1,064,970 16</b>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures .....	17.33	\$1,746,751 60
Maintenance of equipment .....	15.27	1,539,091 38
Conducting transportation .....	56.98	5,738,985 51
General expenses, including taxes .....	10.47	1,064,970 16
<b>Total operating expenses and taxes .....</b>	<b>100.00</b>	<b>\$10,079,798 60</b>
Operating expenses and taxes per mile of road .....		5,483 78
Operating expenses and taxes per train mile run, for trains, earning revenue, 11,871.087 miles .....	.84	
Proportion of operating expenses and taxes for Michigan .....		112,000 49
Total proportion of expenses for Michigan .....		112,000 49
Percentage of expenses to earnings \$131,064.72 .....	85.45	
Net earnings per mile of road .....		542 52
Net earnings per train mile .....		15

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Goshen, Ind., to Benton Harbor, Mich., November 13, 1892.

The above applies to "Michigan division," formerly C. W. & M. R'y, only part of road entering the State of Michigan.

## MAIN LINE.

	Miles.	Miles.
In Michigan, from Benton Harbor to State line .....	35.14	
In Ohio from various to various .....	578.77	
In Indiana from various to various .....	554.22	
In Illinois from various to various .....	478.50	
<b>Total length completed .....</b>		<b>1,636.63</b>
Length of double track on main line .....	55.33	

## BRANCHES.

From Lawrenceburg Junction, Ind., to Aurora, Ind. ....	6.44	
From St. Francisville, Ill., to Vincennes, Ind. ....	8.02	
From East Alton, Ill., to Alton, Ill. ....	4.20	
From Harrison, O., to Hagerstown, Ind. ....	62.36	
From Carey, O., to Findlay, O. ....	15.34	
From Valley Junction, O., to Harrison, O. ....	7.70	
From Columbus, Ind., to Greensburg, Ind. ....	26.21	
From Martinsville, Ind., to Fairland, Ind. ....	37.84	
<b>Total length of branches owned by company .....</b>		<b>168.11</b>
<b>Total length of road belonging to this company (excluding trackage. 33.37) .....</b>		<b>1,804.74</b>
Total length of road belonging to this company in Michigan .....		35.14
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated .....		8.21
<b>Aggregate length of tracks in Michigan belonging to this company, computed as single track .....</b>		<b>43.35</b>
Gauge of track, 4 feet 8½ inches.		

## Proprietary or leased roads operated by this company.

	Total miles.	In Michigan.
Total miles operated by this company .....	1,838.11	35.14

## MICHIGAN RAILROAD RETURNS, 1896.

*Number of bridges and trestles in Michigan.*

	Number.	Aggregate length feet.
Wooden trestles .....	31	1,878
Total .....	31	1,878

*Crossings.—Railroad and highway.*

What railroads cross your road either over or under your grade in this State, and where?

Over:

Michigan Central R. R. at Niles (main line).

Michigan Central R. R. at Niles (South Bend div.)

Number of crossings of highways at grade in this State .....	56
Number of crossings of highways at grade in this State at which there are gates or flagmen .....	3
Number of crossings at which there are electric or automatic signals .....	1

What pattern or patterns in use?

Pneumatic.

Number of crossings of highways over or under railroad: over, 2; under, 1 .....	3
Number of highway bridges, 18 feet above track .....	2

Are your frogs and guard rails blocked as required by act 174, Session Laws of 1883?

Yes.

How are they treated?

Wooden blocks.

*Stations.*

Number of stations on whole lines .....	521
Same in Michigan .....	8

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials .....	9,432
Same in Michigan .....	84

Classify your employée as per following list:

	Number.
Baggagemen .....	80
Brakemen .....	514
Conductors .....	265
Engineers .....	437
Firemen .....	437
Laborers .....	2,450
Shopmen .....	1,625
Yardmen .....	629
Others .....	2,995

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? .....	70.28
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*Road bed and track.*

Number of track sections in Michigan .....	5
Average lengths of sections, miles .....	7.03
Average number of men in each section gang .....	4
Number of new ties put in whole line during the year .....	731,459
Number of new ties put in track and sidings in Michigan .....	7,927
Average number of new ties per mile of road .....	398
New rails put in track:	
Steel [tons, 4,404.1,759], miles .....	35.04
Total miles of track laid with new rails .....	35.04

*Bridges and culverts.*

Amount of trestle work replaced with earth during the year, linear feet .....	41
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Timber culverts replaced during the year:

	Number.
With iron pipe .....	70
With sewer pipe .....	5
With timber .....	40

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender.....	432	\$1,944,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender.....	27	67,500 00
<b>Total .....</b>	<b>459</b>	<b>\$2,011,500 00</b>
Number of passenger cars—12-wheel, including official cars .....	22	\$80,700 00
Number of passenger cars—8-wheel, including official cars .....	248	496,000 00
Number of express and baggage cars .....	97	145,500 00
Number of box freight cars .....	8,648	3,298,000 00
Number of stock cars .....	638	185,000 00
Number of platform cars .....	1,690	332,000 00
Number of ore cars .....	1,195	265,800 00
Number of conductors' way cars .....	211	73,800 00
Other cars .....	382	57,300 00
<b>Total .....</b>	<b>13,101</b>	<b>\$4,925,100 00</b>
Number of locomotives equipped with power brakes .....		437
Number of passenger-train cars equipped with power brakes .....		387
Number of freight cars equipped with power brakes .....		3,394
What patterns of power brakes have you in use, and number of locomotives and cars with each?		
Locomotives, with Westinghouse air brakes .....		345
Locomotives, with New York air brakes .....		78
Locomotives, with steam driver brakes .....		14
Passenger cars, with Westinghouse air brakes .....		387
Freight cars, with Westinghouse air brakes .....		3,394
<b>Total .....</b>		<b>4,698</b>

Are your freight cars being equipped with automatic couplers as required by Act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?

Yes.

What pattern or patterns have you adopted for use?  
Master Car Builder's Standard.

How are your passenger cars heated?  
By steam.

## MILEAGE, TRAFFIC, ETC.

<i>Train mileage.</i>		<i>Entire lines. In Michigan.</i>	
Miles run by passenger trains during the year .....	5,594,936		56,834
Miles run by freight trains during the year .....	6,074,751		60,758
Miles run by mixed trains .....	201,400		4,726
<b>Total mileage of trains earning revenue .....</b>	<b>11,871,087</b>		<b>122,368</b>
<i>Passenger traffic.—Entire lines.</i>			
	Number.	Miles.	Rate.
Number of through passengers carried, earning revenue .....	836,902		
Number of local passengers carried, earning revenue .....	4,840,265		
<b>Total number of passengers carried, earning revenue .....</b>	<b>5,177,167</b>		
Number of passengers carried one mile .....	189,843,185		
Average distance carried .....		36.7	
Average amount received from each passenger .....			\$0 74
Average receipts per mile for through passengers .....			01.936
Average receipts per mile for local passengers .....			02.046
Average receipts per passenger per mile for all passengers .....			02.016
Estimated cost of carrying each passenger one mile .....			01.562
<i>Passenger traffic.—In State of Michigan.</i>			
Number of through passengers carried, earning revenue .....	8,600		
Number of local passengers carried, earning revenue .....	66,978		
<b>Total number of passengers carried, earning revenue .....</b>	<b>75,578</b>		
Number of passengers carried one mile .....	1,686,904		
Average distance carried .....		22.5	
Average amount received from each passenger .....			\$0 44
Average receipts per mile for through passengers .....			01.936
Average receipts per mile for local passengers .....			02.046
Average receipts per passenger per mile for all passengers .....			01.952
Estimated cost of carrying each passenger one mile .....			01.668

*Freight traffic.—Entire lines.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	4,538,094		
Number of tons of local freight carried, earning revenue.....	3,488,454		
Total tons of freight carried, earning revenue .....	8,041,548		
Total mileage of through freight .....		909,744,481	
Total mileage of local freight .....		381,494,246	
Total freight mileage or tons carried one mile .....		1,291,238,727	
Average ton haul for through freight .....		199.6	
Average ton haul for local freight .....		109.5	
Average ton haul for all freight .....		160.6	
Average amount received for each ton haul .....			\$0 99.817
Average receipts ton per mile, for through freight .....			00.500
Average receipts ton per mile, for local freight .....			00.918
Average receipts ton per mile, for all freight .....			00.622
Estimated cost of carrying one ton one mile .....			00.452

*Freight traffic.—In State of Michigan.*

Number of tons of through freight carried, earning revenue.....	314,315		
Number of tons of local freight carried, earning revenue.....	190,578		
Total tons of freight carried, earning revenue .....	504,893		
Total mileage of through freight .....		10,498,134	
Total mileage of local freight .....		4,402,347	
Total freight mileage or tons carried one mile .....		14,900,481	
Average ton haul for through freight .....		33.4	
Average ton haul for local freight .....		23.1	
Average ton haul for all freight .....		29.5	
Average amount received for each ton haul .....			\$0 18.357
Average receipts ton per mile, for through freight .....			00.800
Average receipts ton per mile, for local freight .....			00.918
Average receipts ton per mile, for all freight .....			00.622
Estimated cost of carrying one ton one mile .....			00.531



## FREIGHT TRAFFIC MOVEMENT.—ENTIRE LINES.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	868,056	294,686	1,162,742	14.46
Flour.....	210,919	54,328	265,247	3.30
Other mill products.....	100,236	36,376	136,610	1.70
Hay.....	74,752	50,176	124,928	1.54
Tobacco.....	11,547	10,142	21,689	.27
Cotton.....		63,209	63,209	.79
Fruit and vegetables.....	50,614	101,620	152,234	1.89
<b>Products of animals:</b>				
Live stock.....	136,124	189,212	325,336	4.05
Dressed meats.....	35,116	92,114	127,230	1.58
Other packing house products.....	14,944	31,157	46,101	.57
Poultry, game and fish.....	14,529	7,854	22,383	.28
Wool.....	1,007	4,295	5,302	.07
Hides and leather.....	5,237	15,242	20,479	.25
<b>Products of mines:</b>				
Anthracite coal.....		92,533	99,533	1.24
Bituminous coal.....	864,136	760,320	1,624,456	20.20
Coke.....	12,420	97,238	109,658	1.36
Ores.....		54,266	54,266	.68
Stone, sand and other like articles.....	308,063	128,632	436,695	5.43
Salt.....	5,631	81,229	86,860	1.08
<b>Products of forest:</b>				
Lumber, logs and shingles.....	217,909	660,318	878,227	10.92
<b>Manufactures:</b>				
Petroleum and other oils.....	14,065	118,287	127,352	1.58
Sugar.....	2,919	98,230	101,149	1.26
■ Naval stores.....	6,865	12,246	19,111	.24
Iron, pig and bloom.....	78,078	44,615	122,693	1.53
Iron and steel rails.....	11,414	4,620	16,034	.20
Other castings and machinery.....	171,519	91,430	262,949	3.27
Bar and sheet metal.....	39,693	81,725	121,418	1.51
Cement, brick, and lime.....	137,411	72,416	209,827	2.61
Agricultural implements.....	17,538	9,515	27,053	.34
Wagons, carriages, tools, etc.....	6,541	3,290	9,831	.12
Wines, liquors and beers.....	66,717	29,741	96,458	1.20
Household goods and furniture.....	19,501	7,296	26,797	.33
<b>Merchandise.....</b>	<b>563,185</b>	<b>374,212</b>	<b>937,397</b>	<b>11.66</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	81,788	118,280	200,013	2.49
<b>Total tonnage.....</b>	<b>4,148,818</b>	<b>3,892,730</b>	<b>8,041,548</b>	<b>100.00</b>

## FREIGHT TRAFFIC MOVEMENT.—IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain .....	2,592	8,011	10,603	2.10
Flour .....	19,920	78,291	98,151	19.44
Other mill products .....	832	4,116	4,948	.98
Hay .....	417	845	1,262	.25
Tobacco .....	50	101	151	.03
Fruit and vegetables .....	15,009	45,629	60,638	12.01
<b>Products of animals:</b>				
Live stock .....	331	830	1,161	.23
Dressed meats .....	152	201	353	.07
Other packing house products .....	982	1,948	2,923	.58
Poultry, game and fish .....	29	72	101	.02
Wool .....	38	113	151	.03
Hides and leather .....	292	970	1,262	.25
<b>Products of mines:</b>				
Anthracite coal .....		15,551	15,551	3.08
Bituminous coal .....		53,014	53,014	10.50
Stone, sand and other like articles .....	8,276	27,168	35,444	7.02
Salt .....	6,230	39,261	45,491	9.01
<b>Products of forest:</b>				
Lumber .....	40,434	78,115	118,549	23.48
<b>Manufactures:</b>				
Petroleum and other oils .....		151	151	.03
Sugar .....	11	90	101	.02
Iron, pig and bloom .....	2,471	11,161	13,632	2.70
Iron and steel rails .....	407	855	1,262	.25
Other castings and machinery .....	1,330	3,618	4,948	.98
Bar and sheet metal .....	84	320	404	.08
Cement, brick and lime .....	249	761	1,010	.20
Agricultural implements .....	290	821	1,111	.22
Wagons, carriages, tools, etc. ....	402	1,416	1,818	.36
Wines, liquors and beers .....	346	1,068	1,414	.28
Household goods and furniture .....	599	2,137	2,736	.54
Merchandise .....	9,580	15,261	24,841	4.92
<b>Miscellaneous:</b>				
Other commodities not mentioned above .....	499	1,218	1,717	.34
<b>Total tonnage .....</b>	<b>111,852</b>	<b>393,041</b>	<b>504,893</b>	<b>100.00</b>

## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Co. Fixed minimum rate for business on entire system of \$317,572 per annum, based on 40% of gross earnings. If 40% of gross earnings exceeds minimum excess is paid by company at end of year. They do all varieties of express business, we receiving their freight at our stations only.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

All lines owned by Western Union Telegraph Company. Number of miles unknown. Railway company has free use of one wire for railroad purposes.

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

## INJURED.

January 25, Thomas Glavin, brakeman, Niles. Coupling  
 March 12, E. Rodabaugh, engineer, Benton Harbor. At station; getting off engine.  
 June 23, A. E. Atwood, trespasser, Benton Harbor. Fell from car.  
 July 30, D. Crawley, engineer, Benton Harbor. At station; getting off engine.  
 August 1, Drake Clifford, fireman, Benton Harbor. Fell from engine.  
 August 11, Jno. Barke, trespasser, Benton Harbor. At station.  
 August 18, Mrs. Seeley, Niles. Highway crossing  
 August 18, Mrs. Davis, Niles. Highway crossing  
 September 18, M. Hutchins, conductor, Benton Harbor. Fell from tank.  
 September 23, Geo. Shimm, brakeman, Benton Harbor. Fell from car  
 October 27, Henry Knott, trespasser, Niles. Walking on track.  
 November 27, W. S. Ferguson, conductor, Berrien Center. Fell from car.  
 November 24, H. E. Brown, conductor, Sodus. Derailment.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN

Causes of accident.	Killed.			Injured.		
	Passengers.	Employees.	Others.	Passengers.	Employees.	Others.
Coupling cars .....					1	
Derailments .....					1	
Falling from trains .....					3	
Getting on and off trains .....					2	
Highway crossings .....						2
Miscellaneous .....					1	
Trespassers on trains .....						1
Trespassers on tracks .....						2
Total .....					8	5

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons injured during the year ..... 13  
 Number of casualties purely accidental ..... 10  
 Number resulting from lack of caution, carelessness, or misconduct ..... 3  
 Trespassers and tramps killed or injured ..... 3

## CLASSIFICATION OF EMPLOYEES.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Brakemen .....		2	2
Conductors .....		4	4
Engineers .....		1	1
Firemen .....		1	1
Total .....		8	8

STATE OF OHIO, }  
 COUNTY OF HAMILTON, } ss.

E. F. Osborn, Secretary and P. A. Hewitt, Auditor of the Cleveland, Cincinnati, Chicago & St. Louis Railway Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

Signed,

[L. S. OF E. F.]

E. F. OSBORN, Secretary.  
P. A. HEWITT, Auditor.

Subscribed and sworn to before me this 25th day of March, A. D. 1897.

[L. S.]

JOSEPH MOORE,  
Notary Public.

**ANNUAL REPORT**  
**OF THE**  
**DETROIT, GRAND HAVEN & MILWAUKEE RAILWAY**  
**COMPANY,**

*For the year ending December 31, 1896.*

[ Filed March 27, 1897. ]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President and General Manager, CHARLES M. HAYS, Montreal, Province of Quebec.*  
*Secretary and Treasurer, JAMES H. MUIR, Detroit, Michigan.*  
*General Superintendent, F. H. McGUIGAN, Montreal, Province of Quebec.*  
*Superintendent, A. B. ATWATER, Detroit, Michigan.*  
*Superintendent of Motive Power, F. W. MORSE, Montreal, Province of Quebec.*  
*Superintendent of Car Department, W. McWOOD, Montreal, Province of Quebec.*  
*Master Mechanic, HERBERT ROBERTS, Fort Gratiot, Michigan.*  
*Master Car Builder, THOMAS SUTHERLAND, Fort Gratiot, Michigan.*  
*Chief Engineer, JOSEPH HOBSON, Montreal, Province of Quebec.*  
*Assistant Engineer, GEORGE MASSON, Detroit, Michigan.*  
*General Traffic Manager, GEORGE B. REEVE, Montreal, Province of Quebec.*  
*General Passenger and Ticket Agent, W. E. DAVIS, Montreal, Province of Quebec.*  
*Assistant General Passenger and Ticket Agent, E. H. HUGHES, Chicago, Illinois.*  
*General Freight Agent, JOHN W. LOUD, Montreal, Province of Quebec.*  
*First Assistant General Freight Agent, DAVID BROWN, Chicago, Illinois.*  
*Solicitor, E. W. MEDDAUGH, Detroit, Michigan.*

**DIRECTORS.**

CHARLES M. HAYS, Montreal, Province of Quebec.  
 A. B. ATWATER, Detroit, Michigan.  
 CHARLES BUNOHER, Detroit, Michigan.  
 JOSEPH HOBSON, Montreal, Province of Quebec.  
 GEORGE JEROME, Detroit, Michigan.  
 E. W. MEDDAUGH, Detroit, Michigan.  
 CHARLES PERCY, Montreal, Province of Quebec.  
 JOHN PRIDGON, JR., Detroit, Michigan.  
 W. J. SPICER, Detroit, Michigan.

Terms expire 4th October, 1897, or when successors are appointed.

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: 7th March, 1834, as the Detroit & Pontiac Railroad Co.  
 Number of stockholders at date of last election: 11.  
 Number of stockholders in Michigan at same date: 6.  
 Amount of full paid stock held in Michigan at same date: \$300.  
 Date of annual meeting of stockholders: First Monday in October.  
 Fiscal year of company ends: 31st December.  
 General offices of the company are located at Detroit, Michigan.

# DETROIT, GRAND HAVEN & MILWAUKEE RAILWAY CO. 153

## GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$977,820 97
Total expenses, including taxes.....	\$908,577 41	
Net income.....		\$74,243 56
Interest on funded debt.....	\$324,500 00	
Interest on unfunded debt.....	27,009 88	
		351,509 88
Balance for the year, a deficit of.....	\$277,266 32	
Balance paid by the Grand Trunk Railway Company of Canada under guaranties.....		\$277,266 32
	\$277,266 32	\$277,266 32

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$1,500,000 00
Par value of shares.....	\$50 00	
Number of shares issued.....	30,000	
Amount paid in on common.....	\$1,500,000 00	
Total amount paid in as per books of the company.....		\$1,500,000 00
Paid in per mile of road owned by company, 189 miles.....		7,936 51

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

Class, character and date of issue.	Rate of Interest.	When due.	Where payable.	Amount outstanding.
Equipment mortgage bonds, issued Nov. 14, 1878.....	6%	Nov. 14, 1918...	In New York or London.....	\$2,000,000 00
Consolidated mortgage bonds, issued Nov. 15, 1878.....	6%	Nov. 15, 1918....	In New York or London.....	3,200,000 00
Mortgage on land forming part of Detroit depot.....	5%	Oct. 1, 1900 ....	In London.....	146,000 00
Mortgage on land forming part of Detroit depot.....	6½%	On demand ....	In Detroit, Mich.	80,000 00
Total funded debt.....				\$5,426,000 00

### UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For miscellaneous.....		\$1,975,976 11

## RECAPITULATION.

Total funded debt.....	\$5,426,000 00
Total unfunded debt.....	1,975,976 11
Total debt liabilities.....	\$7,401,976 11
Amount of debt liabilities per mile of road, 189 miles.....	39,163 89
Total amount of stock and debt.....	8,901,976 11
Stock and debt per mile of road, 189 miles.....	47,100 40

## MICHIGAN RAILROAD RETURNS, 1896.

## GENERAL BALANCE SHEET.—Dr.

Construction and equipment account.....		\$7,065,492 38
Cash items:		
Cash.....	\$18,548 10	
Bills receivable.....	100,400 02	
Due from agents.....	27,003 01	
		145,946 13
Other assets:		
Debit balances from companies and individuals.....	\$379,807 17	
		379,807 17
Grand Trunk Railway Company of Canada for interest coupons held for payments under guaranties, per contra.....		1,310,730 48
Total.....		\$8,901,976 11

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....		\$1,500,000 00
Funded debt.....		5,426,000 00
		\$6,926,000 00
Unfunded debt:		
Interest unpaid.....	\$78,093 40	
Vouchers and accounts.....	587,152 23	
Other liabilities:		
Grand Trunk Railway Company of Canada for payments under guaranties.....	1,310,730 48	
		1,975,976 11
Total.....		\$8,901,976 11

## COST OF ROAD AND EQUIPMENT.

## PURCHASED BY PRESENT COMPANY.

When purchased: September 4, 1878. Transferred by receiver, October 19, 1878.		
Original cost to present company, of road and equipment.....		\$6,700,000 00
Amount expended since purchase, account of construction.....		319,731 33
Amount expended since purchase, account of equipment.....		45,761 00
Total cost to date of report.....		7,065,492 33
Average cost per mile of road (not including sidings) 189 miles.....		37,383 56
Proportion of cost for Michigan.....		7,065,492 38

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Improvement of track—extensions and new sidings.....		\$9,056 11
Total charges.....		\$9,056 11
Total charges to property account as above.....		9,056 11
Property sold and credited.....		831 00
Net addition to property account.....		8,225 11

## ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

Main line and branches:		
Local fares.....	\$353,122 52	
Through fares.....	12,048 94	
Total passenger fares.....	\$365,166 46	
Express and baggage.....	27,762 71	
Mails.....	30,227 33	
Other sources.....	3,573 10	
Total passenger department earnings.....		\$426,729 60
Per train mile.....		\$0 87
Per mile of road.....		2,257 83

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic.....	\$417,746 34	
Through traffic.....	77,332 01	
Total traffic.....	<u>\$495,078 35</u>	
Total freight department earnings.....		\$495,078 35
Per train mile.....	\$1 18	
Per mile of road.....	2,619 46	
Total transportation earnings, entire line.....		<u>\$921,807 95</u>
Transportation earnings per mile of road.....	\$4,877 29	
Transportation earnings per train mile.....	1 01	
Miscellaneous receipts from operating account, other than for transportation, as follows:		
From switching charges balance.....	45,331 00	
From rents of tracks, yards and terminals.....	7,506 78	
From rents not otherwise provided for.....	<u>3,175 24</u>	
Total.....		56,013 02
Total earnings from operation of road.....		<u>\$977,820 97</u>
Total earnings per mile of road.....	\$5,178 06	
Total earnings per train mile.....	1 07	
Proportion of earnings for Michigan.....	977,820 97	
Total earnings per mile of road in Michigan.....	<u>5,173 06</u>	
Total income from all sources.....		<u>\$977,820 97</u>
Proportion of income for Michigan.....		<u>977,820 97</u>

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway.....	\$69,777 07
Renewals of rails.....	23,886 00
Renewals of ties.....	42,055 60
Repairs and renewals of bridges and culverts.....	15,087 01
Repairs and renewals of fences, road crossings, signs and cattle guards.....	9,361 20
Repairs and renewals of buildings and fixtures.....	16,164 64
Repairs and renewals of docks and wharves.....	9,414 12
Stationery and printing.....	138 90
Total.....	<u>\$185,894 54</u>

## MAINTENANCE OF EQUIPMENT.

Superintendence.....	\$2,314 79
Repairs and renewals of locomotives.....	60,124 28
Repairs and renewals of passenger cars.....	20,401 65
Repairs and renewals of freight cars.....	38,520 65
Repairs and renewals of work cars.....	58 10
Repairs and renewals of shop machinery and tools.....	9,068 76
Stationery and printing.....	181 54
Other expenses.....	<u>3,471 75</u>
Total.....	<u>\$134,141 53</u>

## CONDUCTING TRANSPORTATION.

Superintendence .....	\$10,221 85
Engine and roundhouse men .....	89,536 00
Fuel for locomotives .....	69,882 79
Water supply for locomotives .....	3,729 74
Oil, tallow and waste for locomotives .....	2,110 72
Other supplies for locomotives .....	1,614 75
Train service .....	54,112 84
Train supplies and expenses .....	20,632 37
Switchmen, flagmen and watchmen .....	37,351 45
Telegraph expenses .....	25,114 52
Station service .....	118,186 16
Station supplies .....	11,682 23
Car mileage—balance .....	22,639 00
Hire of equipment .....	19,500 00
Loss and damage .....	2,073 88
Injuries to persons .....	5,507 57
Clearing wrecks .....	146 85
Advertising .....	4,017 79
Outside agencies .....	17,587 43
Commissions .....	989 66
Rent of buildings and other property .....	6,860 83
Stationery and printing .....	5,022 24
Total .....	<u>\$528,018 67</u>

## GENERAL EXPENSES.

Salaries of general officers .....	\$7,186 98
Salaries of clerks and attendants .....	11,029 37
General office expenses and supplies .....	1,012 39
Insurance .....	5,787 41
Law expenses .....	3,130 14
Stationery and printing (general offices) .....	170 57
Taxes .....	27,205 82
Total .....	<u>\$55,522 68</u>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures .....	20.57	\$185,894 54
Maintenance of equipment .....	14.85	134,141 62
Conducting transportation .....	58.44	528,018 67
General expenses, including taxes .....	6.14	55,522 68
Total operating expenses and taxes .....	100.00	\$903,577 41
Operating expenses and taxes per mile of road .....		4,780 83
Operating expenses and taxes per train mile run, for trains earning revenue, 910,803 miles .....		99
Proportion of operating expenses and taxes for Michigan .....		903,577 41
Total proportion of expenses for Michigan .....		<u>\$903,577 41</u>
Percentage of expenses to earnings .....	92.41	
Net earnings per mile of road .....		392 82
Net earnings per train mile .....		<u>08</u>

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Detroit, Michigan, to Grand Haven, Michigan, 22d November, 1858.

## MAIN LINE.

	Miles.
In Michigan, from Detroit, Michigan, to Grand Haven, Michigan .....	189.00
Total length completed .....	189.00
Total length of road belonging to this company .....	189.00
Total length of road belonging to this company in Michigan .....	189.00
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated .....	69.14
Aggregate length of tracks in Michigan belonging to this company, computed as single track .....	<u>258.14</u>



Gauge of track, 4 feet 8½ inches.

<i>Number of bridges and trestles in Michigan.</i>		
	Number.	Aggregate length, feet.
Iron bridges .....	25	3,152
Wooden trestles .....	37	2,616
Total .....	62	5,768

*Swing bridges in Michigan.*

How many on your line .....	2
Where located, when built, and length of draw span?	
Near Ferrysburg, one in 1870, two openings, 60 feet each.	
Near Ferrysburg, one in 1884, two openings, 75 feet each.	
Character of structure:	
Truss.	
Material of which constructed:	
Iron.	
Height above water, and depth of water under bridge:	
1870 bridge, height 9 feet 6 inches; depth of water 16 feet.	
1884 bridge, height 8 feet 7 inches; depth of water 24 feet.	
How swung, by engine or hand power:	
Hand power.	
Approaches straight or curved:	
Two straight and two curved.	
Do you require all trains to come to full stop before crossing a draw, and how are they signaled?	
Yes. By distant semaphores.	

*Crossings.—Railroad and highway.*

What railroads cross your road at grade in this State, and at what locality?

Grand Trunk R'y 4 miles west of Detroit station.  
 Detroit & Bay City R. R. 4 miles west of Detroit station.  
 Michigan Air Line R'y at Pontiac.  
 Flint & Pere Marquette R. R. at Holly.  
 Chicago & Grand Trunk R'y at Durand.  
 Ann Arbor R. R. at Durand.  
 Cincinnati, Saginaw & Mackinaw R. R. at Durand.  
 Jackson, Lansing & Saginaw R. R. at Owosso.  
 Detroit, Lansing & Northern R. R. at Ionia.  
 Lowell & Hastings R. R. at Lowell.  
 Grand Rapids & Indiana R. R. at Grand Rapids.  
 Chicago & West Michigan R'y at Grand Rapids and Ferrysburg.

What railroads cross your road either over or under your grade in this State, and where?

Under:  
 Muskegon, Grand Rapids & Indiana R. R. at Berlin.

At what crossings are interlocking and derailing switches in operation?

Milwaukee Junction—crossing of the Detroit & Bay City R. R.

What pattern or patterns have you adopted?

Union Switch and Signal Company's.

Number of crossings of highways at grade in this State .....	251
Number of crossings of highways at grade in this State at which there are gates or flagmen .....	86
Number of crossings at which there are electric or automatic signals .....	2

What pattern or patterns in use?

Electric skeleton bells with push button.

Number of crossings of highways over or under railroad: over, 15; under, 9 .....	24
----------------------------------------------------------------------------------	----

Number of highway bridges 18 feet above track .....	10
-----------------------------------------------------	----

Number of highway bridges less than 18 feet above track .....	5
---------------------------------------------------------------	---

Have safety guards been erected at overhead obstructions?

Yes.

Are your frogs and guard rails blocked as required by act 174, session laws of 1883?

Yes.

How are they treated?

Plank blocking.

*Stations.*

Number of stations on whole lines .....	44
Same in Michigan .....	44

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials 1,253  
 Same in Michigan 1,242

Classify your employes as per following list:

	Number.
Baggagemen .....	24
Brakemen .....	50
Conductors .....	26
Engineers .....	43
Firemen .....	47
Laborers .....	444
Shopmen .....	152
Yardmen .....	36
Others .....	431

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you ..... 385

*Road bed and track.*

Number of track sections in Michigan .....	37
Average lengths of sections, miles .....	5
Average number of men in each section gang .....	4
Number of new ties put in whole line and sidings during the year .....	117,235
Number of new ties put in track and sidings in Michigan .....	117,235
Average number of new ties per mile of road and sidings .....	454
New rails put in track:	
Steel, tons 1,327, miles .....	12
Total miles of track laid with new rails .....	12

*Bridges and culverts.*

	Number.
Timber culverts replaced during the year .....	14
With iron pipe .....	7
With sewer pipe .....	5
With timber .....	2

New bridges built during the year—number 1.

Location.	Kind.	Material.	Month built.	feet in length.
Near Ferrysburg .....	Through plate girder	Iron .....	February .....	110

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender .....	29	\$140,000 00
Total .....	29	\$140,000 00
Number of passenger cars—12-wheel, including official cars .....	5	\$20,500 00
Number of passenger cars—8-wheel, including official cars .....	29	89,900 00
Number of express and baggage cars .....	11	21,000 00
Number of box freight cars .....	362	101,780 00
Number of stock cars .....	25	8,000 00
Number of platform cars .....	196	45,570 00
Number of conductors' way cars .....	21	14,500 00
Other cars as follows:		
Charcoal cars .....	21	
Combination freight and cattle cars .....	19	
Furniture cars .....	10	
Auxiliary cars .....	1	
Total .....	51	20,500 00
Total .....	700	\$318,700 00
Number of locomotives equipped with power brakes .....	29	
Number of passenger-train cars equipped with power brakes .....	45	
Number of freight cars equipped with power brakes .....	24	

What patterns of power brakes have you in use, and number of locomotives and cars with each?  
 Locomotives, with Westinghouse air brakes, 28.  
 Locomotives, with Eames' air brakes, 3.  
 Cars, with Westinghouse air brakes, 69.

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?  
 Yes.

What pattern or patterns have you adopted for use?  
 Gould and Janney.

How are your passenger cars heated?  
 Baker heater (hot water) and steam heat.

## MILEAGE, TRAFFIC, ETC.

	<i>Train mileage.</i>		<i>Entire lines. In Michigan.</i>	
Miles run by passenger trains during the year .....			441,555	441,555
Miles run by freight trains during the year .....			267,252	267,252
Miles run by mixed trains .....			201,996	201,996
Total mileage of trains earning revenue .....			910,803	910,803

*Passenger traffic.—Road all in State of Michigan.*

	Numbers.	Miles.	Rate.
Number of through passengers carried, earning revenue .....	3,025		
Number of local passengers carried, earning revenue .....	547,983		
Total number of passengers carried earning revenue .....	550,958		
Number of passengers carried one mile .....		16,016,951	
Average distance carried .....		29.1	
Average amount received from each passenger .....			\$0 66.25
Average receipts per mile for through passengers .....			02.11
Average receipts per mile for local passengers .....			02.29
Average receipts per passenger per mile for all passengers .....			02.28

*Freight traffic.—Road all in State of Michigan.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue .....	95,815		
Number of tons of local freight carried, earning revenue .....	432,879		
Total tons of freight carried, earning revenue .....	528,694		
Total mileage of through freight .....		18,108,078	
Total mileage of local freight .....		23,588,871	
Total freight mileage or tons carried one mile .....		41,696,949	
Average ton haul for through freight .....		189.0	
Average ton haul for local freight .....		54.5	
Average ton haul for all freight .....		78.9	
Average amount received for each ton haul .....			\$0 93.64
Average receipts ton per mile, for through freight .....			00.43
Average receipts ton per mile, for local freight .....			01.77
Average receipts ton per mile, for all freight .....			01.19

## FREIGHT TRAFFIC MOVEMENT.—ROAD ALL IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	33,415	32,040	65,455	12.88
Flour.....	11,517	57,806	69,123	13.07
Other mill products.....	2,724	18,060	20,784	3.93
Hay.....	12,239	6,235	18,474	3.50
Tobacco.....	11	150	161	.08
Fruit and vegetables.....	14,809	8,299	23,108	4.37
Potatoes.....	7,354	2,850	10,204	1.98
<b>Products of animals:</b>				
Live stock.....	10,461	8,104	18,565	3.51
Dressed meats.....	100	5,210	5,310	1.01
Other packing house products.....	61	161	222	.04
Poultry, game and fish.....	340	1,667	2,007	.38
Wool.....	449	226	675	.13
Hides and leather.....	593	1,388	1,983	.38
<b>Products of mines:</b>				
Anthracite coal.....	5,432	26,262	31,694	6.00
Bituminous coal.....	5,718	6,772	12,490	2.36
Coke.....	36	221	257	.05
Ores.....	37	77	114	.02
Stone, sand and other like articles.....	31,236	2,194	33,430	6.32
Salt.....		1,238	1,238	.23
<b>Products of forest:</b>				
Lumber.....	10,483	40,680	51,143	9.67
Logs.....	1,056	4,161	5,217	.99
Shingles.....	1,010	1,320	2,330	.44
<b>Manufactures:</b>				
Petroleum and other oils.....	99	1,442	1,541	.29
Sugar.....	116	2,024	2,140	.41
Iron, pig and bloom.....	709	2,162	2,871	.54
Iron and steel rails.....	30	132	162	.03
Other castings and machinery.....	368	2,269	2,637	.50
Bar and sheet metal.....		879	879	.17
Cement, brick, and lime.....	4,232	7,718	11,950	2.26
Agricultural implements.....	244	934	1,178	.22
Wagons, carriages, tools, etc.....	1,409	497	1,906	.36
Wines, liquors and beers.....	291	364	655	.12
Household goods and furniture.....	5,480	1,391	6,871	1.30
<b>Merchandise.....</b>	<b>28,778</b>	<b>39,308</b>	<b>68,086</b>	<b>12.88</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	25,474	28,360	53,834	10.18
<b>Total tonnage.....</b>	<b>216,313</b>	<b>312,381</b>	<b>528,694</b>	<b>100.00</b>

## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The National Express Company has exclusive right for passenger trains, and pays \$50.00 per day, for not exceeding 5,000 lbs. per day, and 60 cents per 100 lbs. excess, carrying light freight, money, etc., and taking freight to and from depots. The total payments for any one year not to be less than \$20,000.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

189 miles of wire belonging to the Western Union Telegraph Co., using the railroad company's poles. A second wire, 46¼ miles long, of same telegraph company, with poles, runs between Detroit and Holly.

## TRANSPORTATION COMPANIES.

*Sleeping, drawing-room and palace car companies.*

What sleeping, drawing-room, chair or other palace passenger cars, not the exclusive property of your own or some other railroad company, have, during the year, been in use on your road in the State of Michigan, and on what terms? If rented by you, or allowed mileage between local points in this State, what was the amount paid for the use of such cars during the period under report?

Wagner Palace Car Co., New York, N. Y.; allowed mileage.....	\$4,215 34
Pullman's Palace Car Company, Chicago, Illinois; allowed mileage.....	248 20
	<hr/>
	\$4,463 54
	<hr/>

Both these companies get the fares for seats and berths.

*Fast freight lines.*

To what fast freight lines or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

Name of company.	General office.	Amount paid.
American Refrigerator Transit Co.	St. Louis, Mo.	\$2 97
Armour Car Lines.	Chicago, Ill.	146 38
Armes Palace Horse Car Co.	Chicago, Ill.	3 04
Burton Stock Car Co.	Boston, Mass.	8 55
California Fruit Transportation Co.	Chicago, Ill.	80
Canada Cattle Car Co.	Chicago, Ill.	2 02
Chicago Refrigerator Car Line.	Chicago, Ill.	88 40
Chicago Car and Coal Co.	Chicago, Ill.	1 72
Continental Fruit Express.	Chicago, Ill.	1 28
Commerce Dispatch Line.	Indianapolis, Ind.	1 48
Cudahy Milwaukee Refrigerator Line.	Milwaukee, Wis.	81
Cudahy Refrigerator Line.	South Omaha, Neb.	1 50
Columbia Tank Line.	Indianapolis, Ind.	6 17
Dold Packing Co.	Kansas City, Mo.	1 00
Deere & Manson Co.	St. Louis, Mo.	50
Detroit Iron Furnace Co.	Detroit, Mich.	8 88
Eureka Transportation Co.	Indianapolis, Ind.	2 56
Excelsior Horse Car Line.	Chicago, Ill.	49
Freeman Brothers.	Pontiac, Mich.	1 48
Hammond Refrigerator Line.	Hammond, Ind.	169 47
Havens, C. B. & Co.	Omaha, Neb.	1 18
Hicks' Stock Car Co.	Chicago, Ill.	49
International Fruit Dealers' Despatch.	Chicago, Ill.	3 38
I. E. B. Furniture Line.	Atlanta, Ga.	1 39
Kingman & Co.	Peoria, Ill.	38
Kingan Refrigerator Line.	Indianapolis, Ind.	1 35
Kansas City Refrigerator Car Co.	Kansas City, Mo.	08
Libby, McNeil & Libby Refrigerator Line.	Chicago, Ill.	97
Live Poultry Transportation Co.	Chicago, Ill.	8 69
Lipton Refrigerator Line.	Chicago, Ill.	35 19
Michigan Ammonia Works.	Detroit, Mich.	6 24
Mather Horse & Stock Car Co.	Chicago, Ill.	2 17
Merchants' Despatch Transportation Co.	New York, N. Y.	594 00
Morris Refrigerator Line.	Chicago, Ill.	66 85
Morris Coal & Transportation Co.	Cleveland, O.	11 55
Menasha Wooden Ware Co.	Chicago, Ill.	07
National Despatch Line.	St. Albans, Vt.	3,697 15
Chicago, Boston & Liverpool Refrigerator Line.	St. Albans, Vt.	382 12
New York Despatch Refrigerator Line.	Boston, Mass.	379 82
New England Car Co.	Boston, Mass.	1 00
North & South Rolling Stock Co.	St. Louis, Mo.	4 46
Overland Fruit Despatch.	Los Angeles, Cal.	1 41
Omaha Packing Co.	South Omaha, Neb.	09
Ohio & Pennsylvania Coal Co.	Cleveland, O.	07
Pittsburg Fast Flour Line.	Pittsburg, Pa.	25
Pittsburg Consolidated Coal Co.	Pittsburg, Pa.	40
Provision Dealers' Despatch.	Chicago, Ill.	1 44
Rend & Co., W. F.	Chicago, Ill.	16
St. Charles Car Co.	St. Louis, Mo.	1 01
St. Louis Refrigerator Car Co.	St. Louis, Mo.	4 48
Southwestern Millers' Despatch.	Kansas City, Mo.	49
Street's Stable Car Lines.	Chicago, Ill.	5 91
Swift Refrigerator Line.	Chicago, Ill.	158 14
Southern Despatch Lumber Line.	Louisville, Ky.	77
Union Iron Works.	Detroit, Mich.	105 00
Union Tank Line.	New York, N. Y.	40 16
Union Refrigerator Transit Co.	St. Louis, Mo.	22 47
Weaver-Getz Co.	Chicago, Ill.	4 20
White Star Line.	Kansas City, Mo.	1 78
Western Rolling Stock & Equipment Co.	Buffalo, N. Y.	18
Total.		\$5,996 25

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

## KILLED.

March 23, Thomas Verrio, trespasser, Spring Lake. Run over by a night train.  
 May 13, Bessie Swifink, child, Coopersville. Highway crossing. Inquest, "Train running fast."  
 July 16, Nicholas Harbord, trespasser, Lowell. Walking on track. Inquest, "Company exonerated."  
 August 26, John Greening, wiper, Detroit. Fell off engine; accidental. Inquest, "Company exonerated."  
 November 4, Charles Shields, brakeman, Pewamo. Slipped in front of moving cars. No inquest.

## INJURED.

January 6, 1896, Walter Frelor, brakeman, Owosso. Coupling; lack of caution.  
 November 13, 1896, R. Waterworth, brakeman, Detroit. Coupling; lack of caution.  
 December 26, 1896, John Spaven, switch tender, Lake Shore Junction, Detroit. Run over; lack of caution.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Passengers.	Employees.	Others.	Passengers.	Employees.	Others.
Coupling cars.....		1			2	
Falling from trains.....		1				
Highway crossings.....			1			
Miscellaneous.....					1	
Trespassers on tracks.....			2			
Total.....		2	3		3	

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year.....	5
Number of persons injured during the year.....	3
Number resulting from lack of caution, carelessness, or misconduct.....	3
Trespassers and tramps killed or injured.....	2

## CLASSIFICATION OF EMPLOYÉS.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Brakemen.....	1	2	3
Shopmen.....	1		1
Not classified above.....		1	1
Total.....	2	3	5

STATE OF MICHIGAN, } ss.  
 COUNTY OF WAYNE, }

Almon B. Atwater, superintendent, and James H. Muir, secretary and treasurer, of the Detroit, Grand Haven & Milwaukee Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF P. R.]

Signed,

A. B. ATWATER, Superintendent.  
 JAS. H. MUIR, Secretary and Treasurer.

Subscribed and sworn to before me this 26th day of March, A. D. 1897.

[L. S.]

LAWRENCE F. LANG.  
 Notary Public, County of Wayne, State of Michigan.

**THREE MONTHS' REPORT**  
**OF THE**  
**DETROIT, LANSING & NORTHERN RAILROAD COMPANY,**

*For the year ending March 31, 1896.*

[Filed April 19, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President*, NATHANIEL THAYER, Boston, Mass.  
*Secretary*, CHARLES MERRIAM, Boston, Mass.  
*Auditor*, U. B. ROGERS, Grand Rapids, Mich.  
*Treasurer*, CHAS. MERRIAM, Boston, Mass.  
*General Manager*, CHARLES M. HEALD, Grand Rapids, Mich.  
*General Superintendent*, J. K. V. AGNEW, Grand Rapids, Mich.  
*Assistant Superintendent*, T. H. MALONE, Ionia, Mich.  
*General Auditor*, C. W. COURTRIGHT, Boston, Mass.  
*Chief Engineer*, J. J. McVEAN, Grand Rapids, Mich.  
*Assistant Treasurer*, JAMES E. HOWARD, Grand Rapids, Mich.  
*General Passenger Agent*, GEO. DmHAVEN, Grand Rapids, Mich.  
*General Freight Agent*, F. V. DAVIS, Grand Rapids, Mich.  
*Attorney*, WM. ALDEN SMITH, Grand Rapids, Mich.

**DIRECTORS.**

NATHANIEL THAYER, Boston, Mass.  
H. H. HONNEWELL, Boston, Mass.  
J. A. BURNHAM, Boston, Mass.  
G. O. SHATTUCK, Boston, Mass..  
CHARLES MERRIAM, Boston, Mass.  
E. V. R. THAYER, Boston, Mass.  
A. H. HARDY, Boston, Mass.  
GEORGE WHITNEY, Boston, Mass.  
F. H. DAMON, Boston, Mass.  
G. ST. L. ABBOTT, Boston, Mass.  
CHAS. M. HEALD, Grand Rapids, Mich.  
Terms expire second Wednesday in May, 1896.

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: December 28, 1876.  
Number of stockholders at date of last election: 471.  
Number of stockholders in Michigan at same date: 2.  
Amount of full paid stock held in Michigan at same date: \$10,600.  
Date of annual meeting of stockholders: Second Wednesday in May.  
Fiscal year of company ends December 31.  
General offices of the company are located at Boston, Mass., and Grand Rapids, Mich.



DETROIT, LANSING & NORTHERN RAILROAD COMPANY. 165

GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$237,998 51
Total expenses, including taxes .....	\$204,805 77	
Net income .....		\$33,192 74
Interest on funded debt.....	56,885 00	
Interest on unfunded debt.....	208 43	
Rentals of buildings, tracks, etc. ....	33,663 44	
Balance for the three months.....	57,162 13	
Balance (profit and loss) last year.....	151,907 61	
Balance forward to next year.....	\$209,089 74	

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association .....		\$4,410,000 00
Par value of shares .....	\$100 00	
Number of shares issued .....	43,356	
Amount paid in on common .....	\$1,825,600 00	
Amount paid in on preferred.....	2,510,000 00	
Total amount paid in, as per books of the company.....		4,335,600 00
Paid in per mile of road owned by company, 221.57 miles.....		19,567 63

ANALYSIS OF DEBT ACCOUNTS.

FUNDED DEBT.

Class, character and date of issue.	Rate of Interest.	When due.	Where payable.	Amount outstanding.
Detroit, Lansing & Northern R. R. Co., 1st mortgage bonds, 1877 .....	7%	1907.....	Boston, Mass.....	\$2,672,000 00
Ionia & Lansing R. R. Co., 1st mortgage bonds, 1869 .....	5%	1899.....	New York City...	770,000 00
Total funded debt .....				\$3,442,000 00

UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For construction.....	To be paid from earnings.....	\$1,164,474 80
For equipment.....		
For real estate.....		
For renewals.....		
For miscellaneous.....		
For current balances.....		

RECAPITULATION.

Total funded debt.....	\$3,442,000 00
Total unfunded debt.....	1,164,474 80
Total debt liabilities.....	\$4,606,474 80
Amount of debt liabilities per mile of road, 221.57 miles.....	27,901 55
Total amount of stock and debt.....	8,942,074 80
Stock and debt per mile of road, 221.57 miles.....	40,357 78

## GENERAL BALANCE SHEET.—Dr.

Construction account.....	\$7,044,366 96	
Equipment account.....	716,042 97	
Other investments (specifying same):		
Construction and equipment G. R., L. & D. R. R.....	1,303,636 27	
Construction and equipment, S. & W. R. R.....	568,586 85	
		\$9,632,632 85
Cash items:		
Cash.....	\$26,880 73	
Bills receivable.....	3,900 70	
Due from agents.....	11,675 06	
		44,456 49
Other assets:		
Materials and supplies.....	\$87,992 37	
Sinking funds.....	261,065 67	
Debit balances from companies and individuals.....	413,286 48	
Common stock scrip.....	71 00	
		762,415 52
Profit and loss.....		206,069 74
Total.....		\$10,648,574 80

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$4,335,800 00	
Funded debt.....	3,442,000 00	
Capital stock G. R., L. & D. R. R.....	23,000 00	
Capital stock S. & W. R. R.....	4,500 00	
Funded debt G. R., L. & D. R. R.....	1,108,000 00	
Funded debt S. & W. R. R.....	568,000 00	
		\$9,484,100 00
Unfunded debt:		
Interest unpaid.....	\$1,014,191 67	
Vouchers and accounts.....	131,868 71	
Other liabilities (list as follows):		
Net traffic balances due other companies.....	18,414 22	
		1,164,474 60
Total.....		\$10,648,574 80

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction and equipment.....	\$7,760,409 93
Average cost per mile of road, not including sidings, 221.57 miles.....	35,024 64
Proportion of cost for Michigan.....	7,760,409 93

## ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

Main line and branches:		
Local fares.....	\$76,461 53	
Through fares.....	11,232 48	
Total passenger fares.....	\$87,694 01	
Express and baggage.....	5,580 00	
Mails.....	11,542 42	
Total passenger department earnings.....		\$104,816 43
Per train mile.....	\$0 78	
Per mile of road.....	314 08	

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic.....	105,181 17	
Through traffic.....	24,532 97	
Total traffic.....	\$129,714 14	
Total freight department earnings.....		129,714 14

Per train mile .....	\$1 17	
Per mile of road .....	388 69	
Total transportation earnings, entire line .....		\$234,530 57
Transportation earnings per mile of road .....	702 77	
Transportation earnings per train mile .....	96	
Miscellaneous receipts from operating account, other than for transportation, as follows:		
From telegraph companies .....	1,331 87	
From other sources .....	2,086 07	
		3,467 94
Total .....		\$237,998 51
Total earnings from operation of road .....		237,998 51
Total earnings per mile of road .....	\$713 17	
Total earnings per train mile .....	97	
Proportion of taxable earnings for Michigan .....	237,998 51	
Total taxable earnings per mile of road in Michigan .....	713 17	
Total income from all sources .....		\$237,998 51
Proportion of income for Michigan .....		237,998 51

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway .....	\$23,045 73
Renewals of rails .....	440 79
Renewals of ties .....	7,374 64
Repairs and renewals of bridges and culverts .....	1,561 47
Repairs and renewals of fences, road crossings, signs and cattle guards .....	2,097 69
Repairs and renewals of buildings and fixtures .....	3,951 95
Repairs and renewals of telegraph .....	385 87
Stationery and printing .....	87 24
Total .....	\$38,945 38

## MAINTENANCE OF EQUIPMENT.

Superintendence .....	\$1,220 61
Repairs and renewals of locomotives .....	12,973 31
Repairs and renewals of passenger cars .....	8,680 83
Repairs and renewals of freight cars .....	8,743 89
Repairs and renewals of work cars .....	250 31
Repairs and renewals of shop machinery and tools .....	1,223 28
Stationery and printing .....	77 38
Other expenses .....	2,831 37
Total .....	\$36,065 98

## CONDUCTING TRANSPORTATION.

Superintendence .....	\$3,486 75
Engine and roundhouse men .....	18,648 22
Fuel for locomotives .....	24,324 94
Water supply for locomotives .....	1,313 88
Oil, tallow and waste for locomotives .....	796 47
Other supplies for locomotives .....	222 01
Train service .....	12,663 54
Train supplies and expenses .....	3,105 73
Switchmen, flagmen and watchmen .....	5,226 44
Telegraph expenses .....	5,883 43
Station service .....	18,784 68
Station supplies .....	1,725 00
Switching charges—balance .....	721 91
Car mileage—balance .....	1,184 69
Loss and damage .....	403 77
Injuries to persons .....	443 10
Clearing wrecks .....	58 74
Advertising .....	577 91
Outside agencies .....	2,496 50
Commissions .....	4 40
Stockyards and elevators .....	2 50
Rents for tracks, yards and terminals .....	6,065 24
Rent of buildings and other property .....	57 65
Stationery and printing .....	2,464 76
Total .....	\$110,667 26

## GENERAL EXPENSES.

Salaries of general officers .....	\$3,767 88
Salaries of clerks and attendants .....	4,454 85
General office expenses and supplies .....	387 80
Insurance .....	865 90
Law expenses .....	2,054 04
Stationery and printing (general offices) .....	549 25
Other expenses .....	259 19
Taxes .....	6,788 79
<b>Total .....</b>	<b>\$19,127 20</b>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures .....	19.02	\$38,945 88
Maintenance of equipment .....	17.61	36,065 93
Conducting transportation .....	54.08	110,667 26
General expenses, including taxes .....	9.34	19,127 20
<b>Total operating expenses and taxes .....</b>	<b>100.00</b>	<b>\$204,805 77</b>
Operating expenses and taxes per mile of road .....	613.70	
Operating expenses and taxes per train mile run, for trains, earning revenue, 245,031 miles .....	.84	
Proportion of operating expenses and taxes for Michigan .....		204,805 77
<b>Total proportion of expenses for Michigan .....</b>		<b>\$204,805 77</b>
Percentage of expenses to earnings .....	86.05	
Net earnings per mile of road .....	99.47	
Net earnings per train mile .....	.18	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
 From Detroit to Howard City, August, 1871.  
 From Stanton Junction to Big Rapids, July, 1880.  
 From Kiddville, to Belding, 1872.  
 From Alma to Howard City, August, 1886.  
 From Grand Ledge to Grand Rapids, August, 1888.  
 From Oakdale Park to Reed's Lake, August, 1888.

## MAIN LINE.

	Miles.	Miles.
In Michigan, from West Detroit to Howard City .....	156.60	
<b>Total length completed .....</b>		<b>156.60</b>

## BRANCHES.

From Stanton Junction to Big Rapids .....	63.30	
From Kiddville to Belding .....	1.67	
<b>Total length of branches owned by company .....</b>		<b>64.97</b>
Total length of branches owned by company in Michigan .....	64.97	
Total length of road belonging to this company .....		221.57
Total length of road belonging to this company in Michigan .....		221.57
Aggregate length in Michigan of sidings, spurs and other tracks not above enumerated .....		86.32
Aggregate length of tracks in Michigan belonging to this company, computed as single track .....		307.89
Gauge of track, 4 feet 8½ inches.		

## Proprietary or leased roads operated by this company.

Name, description and length of each:	Total miles. In Michigan.	
Detroit to Redford Junction (Union Station Association) .....	13.04	
Lansing to North Lansing (J. L. & S. R. R.) .....	1.00	
Alma to Howard City (S. & W. R. R.) .....	42.57	
Grand Ledge to Grand Rapids (G. R. L. & D. R. R.) .....	53.01	
Oakdale Park to Reed's Lake (G. R. L. & D. R. R.) .....	2.53	
<b>Total .....</b>	<b>112.15</b>	<b>112.15</b>
<b>Total miles operated by the company .....</b>	<b>333.72</b>	<b>333.72</b>

*Number of bridges and trestles in Michigan.*

	Number.	Aggregate Length, feet.
Wooden bridges.....	4	385
Iron bridges.....	25	2,097½
Wooden trestles.....	54	4,578
Total.....	83	7,060½

*Crossings.—Railroad and highway.*

What railroads cross your road at grade in this State, and at what locality?

Flint & Pere Marquette R. R. at Plymouth.  
 Michigan Air Line R. R. at South Lyon.  
 Ann Arbor R. R. at Howell Junction.  
 Chicago & Grand Trunk R. R. at Trowbridge.  
 Lowell & Hastings R. R. at Elmdale.  
 Detroit, Grand Haven & Milwaukee R. R. at Ionia.  
 Toledo, Saginaw & Muskegon R. R. at Sheridan and Greenville.  
 Grand Rapids & Indiana R. R. at Big Rapids and Grand Rapids.  
 Michigan Central R. R. at Grand Rapids.

At what crossings are interlocking and derailing switches in operation?

Ann Arbor R. R. at Howell Junction.  
 Chicago & Grand Trunk at Trowbridge.  
 Lowell & Hastings at Elmdale.  
 Toledo, Saginaw & Muskegon at Sheridan and Greenville.  
 Michigan Central at Grand Rapids.  
 Grand Rapids & Indiana at Grand Rapids.

What pattern or patterns have you adopted?

Gravitt and Union Switch and Signal Co.

Number of crossings of highways at grade in this State..... 459

Number of crossings of highways at grade in this State at which there are gates or flagmen..... 21

Number of crossings at which there are electric or automatic signals..... 1

What pattern or patterns in use?

American Signal.

Number of crossings of highway over or under railroad: over 9, under 11..... 20

Number of highway bridges 18 feet above track..... 9

Have safety guards been erected at overhead obstructions?

Yes.

Are your frogs and guard rails blocked as required by act 174, session laws 1883?

Yes.

How are they treated?

Hart guards and blocked with plank.

*Stations.*

Number of stations on whole lines..... 80

Same in Michigan..... 80.

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials..... 1,146

Same in Michigan..... 1,142

Classify your employes as per following list:

	Number.
Baggagemen.....	9
Brakemen.....	59
Conductors.....	27
Engineers.....	45
Firemen.....	47
Laborers.....	447
Shopmen.....	86
Yardmen.....	32
Others.....	394

*REPAIRS AND RENEWALS.**Fencing in Michigan.*

How many miles of fencing have you?..... 646

*Road bed and track.*

Number of track sections in Michigan.....	65
Average lengths of sections, miles.....	550
Average number of men in each section gang.....	3
Number of new ties put in whole line during the three months.....	2,552
Number of new ties put in track in Michigan.....	2,552
Average number of new ties per mile of road.....	7½

## MICHIGAN RAILROAD RETURNS, 1896.

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender.....	35	\$122,500 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender.....	8	20,000 00
Number of locomotives of 10 to 20 tons weight, exclusive of tender.....	1	1,000 00
<b>Total.....</b>	<b>44</b>	<b>\$143,500 00</b>
Number of passenger cars—12-wheel, including official cars.....	1	2,500 00
Number of passenger cars—8-wheel, including official cars.....	48	120,000 00
Number of express and baggage cars.....	17	25,500 00
Number of box freight cars.....	505	128,250 00
Number of stock cars.....	43	10,750 00
Number of platform cars.....	646	113,030 00
Number of conductors' way cars.....	26	5,200 00
Other cars as follows:		
Tool.....	1	
Painter.....	1	
Kitchen.....	1	
Tender to excavator.....	1	
Road train sleeper.....	1	
Road train dining.....	1	
Excavator.....	1	
Carpenter.....	2	
Bridge gang.....	2	
<b>Total.....</b>	<b>11</b>	<b>2,400 00</b>
<b>Total.....</b>	<b>1,297</b>	<b>\$549,150 00</b>
Number of locomotives equipped with power brakes.....		44
Number of passenger-train cars equipped with power brakes.....		66
Number of freight cars equipped with power brakes.....		13
What patterns of power brakes have you in use, and number of locomotives and cars with each?		
Locomotives, Westinghouse.....		34
Locomotives, New York.....		5
Locomotives, Steam.....		4
Locomotives, Vacuum.....		1
Freight cars, Westinghouse.....		13
Passenger cars, Westinghouse.....		66

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?

Yes.

What pattern or patterns have you adopted for use?  
 Gould automatic coupler.

- How are your passenger cars heated.  
 Steam.

## MILEAGE TRAFFIC, ETC.

	Train mileage.	Entire lines. In Michigan.
Miles run by passenger trains during the year.....	133,883	133,883
Miles run by freight trains during the year.....	111,168	111,168
Miles run by mixed trains.....	12,318	12,318
Total mileage of trains earning revenue.....	245,051	245,051

## Passenger traffic.—Road all in State of Michigan.

	Numbers.	Miles.	Rate.
Number of through passengers carried, earning revenue.....	4,459		
Number of local passengers carried earning revenue.....	113,269		
<b>Total number of passengers carried, earning revenue.....</b>	<b>117,728</b>		
Number of passengers carried one mile.....	3,569,135		
Average distance carried.....		30.317	
Average amount received from each passenger.....			\$0 74.489
Average receipts per mile for through passengers.....			02.625
Average receipts per mile for local passengers.....			02.434
Average receipts per passenger per mile for all passengers.....			02.457

# DETROIT, LANSING & NORTHERN RAILROAD COMPANY. 171

## Freight traffic.—Road all in State of Michigan.

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	17,767		
Number of tons of local freight carried, earning revenue.....	119,912		
Total tons of freight carried, earning revenue.....	137,679		
Total mileage of through freight.....	2,738,301		
Total mileage of local freight.....	8,318,366		
Total freight mileage or tons carried one mile.....	11,056,667		
Average ton haul for through freight.....	154.123		
Average ton haul for local freight.....	69.371		
Average ton haul for all freight.....	80.308		
Average amount received for each ton haul.....			\$0 94.215
Average receipts ton per mile, for through freight.....			00.896
Average receipts ton per mile, for local freight.....			01.264
Average receipts ton per mile, for all freight.....			01.173

## FREIGHT TRAFFIC MOVEMENT.—ROAD ALL IN STATE OF MICHIGAN.

Company's material excluded.

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	3,197	1,101	4,298	3.12
Flour.....	3,032	1,591	4,623	3.36
Other mill products.....	387	442	829	.60
Hay.....	895	664	1,059	.77
Fruit and vegetables.....	12,041	352	12,393	9.00
<b>Products of animals:</b>				
Live stock.....	3,790	540	4,330	3.14
Dressed meats.....	264	62	326	.24
Other packing house products.....	224	15	239	.17
Poultry, game and fish.....	58	4	62	.05
Wool.....	22	10	32	.02
Hides and leather.....	390	283	673	.49
<b>Products of mines:</b>				
Anthracite coal.....	41	4,775	4,816	3.50
Bituminous coal.....	35	10,340	10,375	7.54
Stone, sand, and other like articles.....	120	80	200	.14
Salt.....	19	1,723	1,742	1.27
<b>Products of forest:</b>				
Lumber.....	51,299	10,507	61,806	44.89
Charcoal.....	47	101	148	.11
<b>Manufactures:</b>				
Petroleum and other oils.....	857	582	1,439	1.05
Iron, pig and bloom.....		330	330	.24
Iron and steel rails.....	39	23	62	.05
Other castings and machinery.....	640	697	1,337	.97
Bar and sheet metals.....	30		30	.02
Cement, brick and lime.....	606	566	1,172	.85
Agricultural implements.....	439	381	820	.63
Wagons, carriages, tools, etc.....	366	90	456	.33
Wines, liquors and beers.....	162	183	345	.25
Household goods and furniture.....	4,561	2,410	6,971	5.06
<b>Merchandise.....</b>	<b>5,883</b>	<b>2,363</b>	<b>8,246</b>	<b>5.99</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	7,722	748	8,470	6.15
<b>Total tonnage.....</b>	<b>96,716</b>	<b>40,963</b>	<b>137,679</b>	<b>100.00</b>

## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The American Express Co. at an agreed rate. They handle their own freight at the railroad company's depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
673.38 miles. Detroit, Lansing & Northern R. R. Co.

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE THREE MONTHS ENDING MARCH 31.

## KILLED.

March 13, E. Ryder, conductor, Belding. Fell between cars; accidental.

## INJURED.

March 13, James Bartlett, brakeman, Grand Rapids. Collision; mistook signal G. R. & I. track.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....					1	
Falling from trains.....		1				
Total.....		1			1	

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the three months.....	1
Number of persons injured during the three months.....	1
Number of casualties purely accidental.....	1
Number resulting from lack of caution, carelessness or misconduct.....	1

## CLASSIFICATION OF EMPLOYÉS.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Brakemen.....		1	1
Conductors.....	1		1
Total.....	1	1	2

STATE OF MICHIGAN, } ss.  
COUNTY OF KENT, }

Charles M. Heald, general manager, and U. B. Rogers, auditor, of the Detroit, Lansing & Northern Railroad Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of March, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

CHAS. M. HEALD,  
U. B. ROGERS.

Subscribed and sworn to before me this 17th day of April, A. D. 1897.

[L. S.]

ERNEST N. WELLER,  
Notary Public, Kent County, Michigan.



**NINE MONTHS' REPORT**  
**OF THE**  
**RECEIVER OF**  
**DETROIT, LANSING & NORTHERN RAILWAY COMPANY,**

*For the year ending December 31, 1896.*

[Filed April 19, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*Auditor, U. B. ROGERS, Grand Rapids, Mich.*  
*General Superintendent, J. K. V. AGNEW, Grand Rapids, Mich.*  
*Assistant Superintendent, T. H. MALONE, Ionia, Mich.*  
*Chief Engineer, J. J. McVEAN, Grand Rapids, Mich.*  
*Cashier, JAS. E. HOWARD, Grand Rapids, Mich.*  
*General Passenger Agent, GEO. DEHAVEN, Grand Rapids, Mich.*  
*General Freight Agent, F. V. DAVIS, Grand Rapids, Mich.*  
*Attorney, WM. ALDEN SMITH, Grand Rapids, Mich.*  
*Receiver, CHARLES M. HEALD, Grand Rapids, Mich.*

**DIRECTORS.**

See D., L. & N. R. R. Co. report for three month's ending March 31, 1896.  
 See S. V. & St. L. E. R. Co. report for three month's ending March 31, 1896.

**REMARKS:**

See D., L. & N. R. R. Co. report for three month's ending March 31, 1896.  
 See S. V. & St. L. E. R. Co. report for three month's ending March 31, 1896.

**GENERAL EXHIBIT.**

	Debit.	Credit.
Total earnings from operation.....		\$927,786 45
Total expenses, including taxes.....	\$785,774 40	
Net income.....		\$142,012 05
Interest on unfunded debt.....	\$2,274 55	
Rentals of buildings, tracks, etc.....	38,221 65	
Balance for the nine months.....		<u>106,066 95</u>

**UNFUNDED DEBT.**

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For miscellaneous.....		
For current balances.....		\$41,066 08

## RECAPITULATION.

Total unfunded debt.....	\$41,096 08
Total debt liabilities.....	\$41,096 08
Amount of debt liabilities per mile of road, 358.78 miles.....	114 54

## GENERAL BALANCE SHEET.—Dr.

Construction account:		
D. L. & N. R. R.....	\$7,044,866 96	
G. R., L. & D. R. R.....	1,258,640 00	
S. & W. R. R.....	558,986 65	
S. V. & St. L. R. R.....	603,016 16	
Equipment account:		\$9,465,009 77
D. L. & N. R. R.....	\$716,042 97	
G. R., L. & D. R. R.....	44,996 27	
S. & W. R. R.....	9,600 00	
S. V. & St. L. R. R.....	87,037 00	
	867,676 24	\$10,322,686 01
Cash items:		
Cash.....	\$151,572 07	
Due from agents.....	799 37	152,371 44
Other assets:		
Materials and supplies.....	\$24,027 17	
Debit balances from companies and individuals.....	10,144 49	34,171 66
Total.....		\$10,509,229 11

## GENERAL BALANCE SHEET.—Cr.

C. M. Heald, receiver.....	\$10,362,068 06
Amount of balances brought forward from D. L. & N. and S. V. & St. L. R. R. books.	
Unfunded debt:	
Vouchers and accounts.....	41,096 08
Profit and loss or income accounts.....	106,064 95
Total.....	10,509,229 11

## ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

Main line and branches:	
Local fares.....	\$45,024 79
Through fares.....	333,073 24
Total passenger fares.....	\$378,098 03
Express and baggage.....	18,000 00
Mails.....	39,832 12
Total passenger department earnings.....	\$435,930 15
Per train mile.....	\$0 83
Per mile of road.....	1,150 76

## FREIGHT EARNINGS.

Main line and branches:	
Local traffic.....	\$388,463 57
Through traffic.....	92,499 01
Total traffic.....	\$480,962 58
Total freight department earnings.....	480,962 58
Per train mile.....	\$1 27
Per mile of road.....	1,269 63
Total transportation earnings, entire lines.....	\$916,892 73
Transportation earnings per mile of road.....	\$2,420 89
Transportation earnings per train mile.....	1 02

## Miscellaneous receipts from operating account, other than for transportation, as follows:

From telegraph companies .....	\$5,013 89	
From other sources .....	5,879 83	
		<u>\$10,893 72</u>
Total .....		<u>\$927,786 45</u>
Total earnings from operation of road .....		<u>\$927,786 45</u>
Total earnings per mile of road .....	\$2,449 15	
Total earnings per train mile .....	1 08	
Proportion of taxable earnings for Michigan .....		927,786 45
Total taxable earnings per mile of road in Michigan .....		2,449 15
Income other than from earnings .....		2,274 55
Total income from all sources .....		<u>\$930,061 00</u>
Proportion of income for Michigan .....		<u>930,061 00</u>

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.\*

Repairs of roadway .....	\$85,078 49
Renewals of rails .....	35,140 52
Renewals of ties .....	66,652 48
Repairs and renewals of bridges and culverts .....	2,994 12
Repairs and renewals of fences, road crossings, signs and cattle guards .....	5,654 59
Repairs and renewals of buildings and fixtures .....	16,824 44
Repairs and renewals of telegraph .....	5,897 65
Stationery and printing .....	61 03
Other expenses .....	271 37
Total .....	<u>\$218,574 72</u>

## MAINTENANCE OF EQUIPMENT.

Superintendence .....	\$4,472 01
Repairs and renewals of locomotives .....	42,396 15
Repairs and renewals of passenger cars .....	19,758 04
Repairs and renewal of freight cars .....	31,170 11
Repairs and renewals of work cars .....	757 48
Repairs and renewals of shop machinery and tools .....	4,369 42
Stationery and printing .....	335 72
Other expenses .....	6,216 51
Total .....	<u>\$109,505 44</u>

## CONDUCTING TRANSPORTATION.

Superintendence .....	\$13,550 95
Engine and roundhouse men .....	69,039 77
Fuel for locomotives .....	75,924 14
Water supply for locomotives .....	4,302 61
Oil, tallow and waste for locomotives .....	2,563 36
Other supplies for locomotives .....	701 70
Train service .....	43,359 50
Train supplies and expenses .....	11,168 17
Switchmen, flagmen and watchmen .....	15,972 75
Telegraph expenses .....	18,759 85
Station service .....	67,081 31
Station supplies .....	5,063 35
Switching charges—balance .....	2,668 51
Car mileage—balance .....	5,134 13
Loss and damage .....	1,845 36
Injuries to persons .....	2,677 08
Clearing wrecks .....	353 30
Advertising .....	4,452 57
Outside agencies .....	10,177 95
Commissions .....	25 52
Rents for tracks, yards and terminals .....	31,986 09
Rent of buildings and other property .....	873 78
Stationery and printing .....	9,577 38
Total .....	<u>\$397,349 11</u>

## GENERAL EXPENSES.

Salaries of general officers .....	\$10,424 93
Salaries of clerks and attendants .....	16,413 78
General office expenses and supplies .....	1,439 07
Insurance .....	2,804 03
Law expenses .....	4,199 81
Stationery and printing (general offices) .....	916 23
Other expenses .....	4,312 01
Taxes .....	19,835 27
<b>Total</b> .....	<b>\$80,345 13</b>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures .....	27.82	\$218,574 72
Maintenance of equipment .....	13.93	109,505 44
Conducting transportation .....	50.57	397,349 11
General expenses, including taxes .....	7.68	60,345 13
<b>Total operating expenses and taxes</b> .....	<b>100.00</b>	<b>\$785,774 40</b>
Operating expenses and taxes per mile of road .....	\$2,074.27	
Operating expenses and taxes per train mile run, for trains earning revenue, 802,257 miles .....	.87	
Proportion of operating expenses and taxes for Michigan .....		\$785,774 40
Percentage of expenses to earnings .....	84.69	
Net earnings per mile of road .....	374.88	
Net earnings per train mile .....	.16	

## DESCRIPTION OF ROAD.

MAIN LINE.		Miles.	Miles.
In Michigan, from West Detroit to Howard City .....		156.60	
<b>Total length completed</b> .....			156.60
BRANCHES.			
From Stanton Junction to Big Rapids .....	63.30		
From Belding to Kiddville .....	1.67		
From Alma to Howard City .....	42.57		
From Grand Ledge to Grand Rapids .....	53.01		
From Oakdale Park to Reed's Lake .....	2.53		
From Paines to St. Louis .....	28.60		
From Alma to Ithaca .....	6.90		
From St. Louis to Alma .....	3.60		
<b>Total length of branches owned by company</b> .....			202.18
<b>Total length of road belonging to this company</b> .....			358.78
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated .....			112.05
<b>Aggregate length of tracks in Michigan belonging to this company, computed as single track</b> .....			<b>470.83</b>
Gauge of track, 4 feet 8½ inches.			

## Proprietary or leased roads operated by this company.

Name, description and length of each:	Total miles. In Michigan.
Detroit to Redford Junction (Union Station Association) .....	13.04
Lansing to North Lansing (J., L. & S. R'y) .....	1.00
East Saginaw to Paines (J., L. & S. R'y) .....	6.00
<b>Total</b> .....	<b>20.04</b>
<b>Total miles operated by the company</b> .....	<b>378.82</b>

## Number of bridges and trestles in Michigan.

	Number.	Aggregate length, feet.
Wooden bridges .....	7	458
Iron bridges .....	26	2,707½
Wooden trestles .....	74	5,219
<b>Total</b> .....	<b>107</b>	<b>8,384½</b>

# DETROIT, LANSING & NORTHERN RAILROAD COMPANY. 177

## Crossings.—Railroad and highway.

What railroads cross your road at grade in this State, and at what locality?

Flint & Pere Marquette R. R. at Plymouth.  
Michigan Air Line R. R. at South Lyon.  
Ann Arbor R. R. at Howell Junction and St. Louis.  
Chicago & Grand Trunk R. R. at Trowbridge.  
Lowell & Hastings R. R. at Elmdale.  
Detroit, Grand Haven & Milwaukee R. R. at Ionia.  
Toledo, Saginaw and Muskegon R. R. at Sheridan and Greenville.  
Grand Rapids & Indiana R. R. at Big Rapids and Grand Rapids.  
Michigan Central R. R. at Grand Rapids.

At what crossings are interlocking and derailling switches in operation?

Ann Arbor R. R. at Howell Junction.  
Chicago & Grand Trunk R. R. at Trowbridge.  
Lowell & Hastings R. R. at Elmdale.  
Toledo, Saginaw and Muskegon R. R. at Sheridan and Greenville.  
Michigan Central R. R. at Grand Rapids.  
Grand Rapids and Indiana R. R. at Grand Rapids.

What pattern or patterns have you adopted?

Gravitt and Union Switch & Signal Co.

Number of crossings of highways at grade in this State 505

Number of crossings of highways at grade in this State at which there are gates or flagmen 21

Number of crossings at which there are electric or automatic signals 1

What pattern or patterns in use?

American Signal Co.

Number of crossings of highways over or under railroad:

Over 9, under 11.

Number of highway bridges 18 feet above track:

Nine.

Have safety guards been erected at overhead obstructions?

Yes.

Are your frogs and guard rails blocked as required by act 174, session laws of 1883?

Yes.

How are they treated?

Hart guards and blocked with plank.

## Stations.

Number of stations on whole lines. 80

Same in Michigan. 80

## Employees.

Number of persons regularly employed on all roads operated by company, including officials 1,112

Same in Michigan. 1,108

Classify your employés as per following list:

	Number.
Baggagemen	9
Brakemen	54
Conductors	27
Engineers	47
Firesmen	46
Laborers	424
Shopmen	87
Yardmen	29
Others	339

## REPAIRS AND RENEWALS.

### Fencing in Michigan.

How many miles of fencing have you? 724.14

### Road bed and track.

Number of track sections in Michigan. 72

Average length of sections (miles). 5.50

Average number of men in each section gang. 3

Number of new ties put in whole line during the nine months. 193,513

Number of new ties put in track in Michigan. 193,513

Average number of new ties per mile of road. 511

New rails put in track:

Steel, tons 1,258 200-2240; miles. 22.56

Total miles of track laid with new rails. 11.28

*Bridges and culverts.*

	Number.
Timber culverts replaced during the nine months .....	13
With sewer pipe .....	13
New bridges built during the nine months .....	4

Location.	Kind.	Material.	Month built.	Feet in length.
Three miles east of Grand Rapids.	Pile trestle .....	Wood .....	August .....	42
One mile east of Eagle.	Cattle pass .....	Iron and wood .....	June .....	10
Ithaca, branch .....	Timber trestle .....	Wood .....	June .....	12
Ithaca, branch .....	Timber trestle .....	Wood .....	September .....	12

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender .....	35	\$122,500 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender .....	11	27,500 00
Number of locomotives of 10 to 20 tons weight, exclusive of tender .....	1	1,000 00

Total .....

Number of passenger cars—12-wheel, including official cars .....	1	\$2,500 00
Number of passenger cars—8-wheel, including official cars .....	50	125,000 00
Number of express and baggage cars .....	18	27,000 00
Number of box freight cars .....	514	128,500 00
Number of stock cars .....	43	10,750 00
Number of platform cars .....	686	120,050 00
Number of conductors' way cars .....	28	5,600 00

## Other cars as follows:

Tool .....	1	
Painter .....	1	
Kitchen .....	1	
Store material .....	1	
Tender to excavator .....	1	
Road train sleeper .....	1	
Road train dining .....	1	
Excavator .....	1	
Carpenter .....	2	
Bridge gang .....	2	
Total .....	12	2,650 00

Total .....

Number of locomotives equipped with power brakes .....	47
Number of passenger-train cars equipped with power brakes .....	69
Number of freight cars equipped with power brakes .....	13

What patterns of power brakes have you in use, and number of locomotives and cars with each?

Locomotives, Westinghouse .....	38
Locomotives, New York .....	4
Locomotives, Steam .....	4
Locomotives, Vacuum .....	1
Freight cars, Westinghouse .....	13
Passenger cars, Westinghouse .....	69

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?

Yes.

What pattern or patterns have you adopted for use?

Gould automatic.

How are your passenger cars heated.

Steam.

## MILEAGE TRAFFIC, ETC.

*Train mileage.*

	Entire lines.
Miles run by passenger trains during the year.....	522,825
Miles run by freight trains during the year.....	379,432
Miles run by mixed trains.....	62,989
Total mileage of trains earning revenue.....	902,257

*Passenger traffic.—Road all in State of Michigan.*

	Numbers.	Miles.	Rate.
Number of through passengers carried, earning revenue.....	15,150		
Number of local passengers carried, earning revenue.....	533,004		
Total number of passengers carried earning revenue.....	548,154		
Number of passengers carried one mile.....	18,592,754		
Average distance carried.....		38.919	
Average amount received from each passenger.....			\$0 68.977
Average receipts per mile for through passengers.....			02.080
Average receipts per mile for local passengers.....			02.080
Average receipts per passenger per mile for all passengers.....			02.084

*Freight traffic.—Road all in State of Michigan.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue....	69,074		
Number of tons of local freight carried, earning revenue.....	377,582		
Total tons of freight carried, earning revenue.....	446,656		
Total mileage of through freight.....		10,294,398	
Total mileage of local freight.....		31,369,190	
Total freight mileage or tons carried one mile.....		41,663,588	
Average ton haul for through freight.....		149.034	
Average ton haul for local freight.....		83.080	
Average ton haul for all freight.....		93.289	
Average amount received for each ton haul.....			\$1 07.693
Average receipts ton per mile for through freight.....			00.899
Average receipts ton per mile for local freight.....			01.238
Average receipts ton per mile for all freight.....			01.154

## FREIGHT TRAFFIC MOVEMENT.—ROAD ALL IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	25,970	2,680	28,650	6.41
Flour.....	12,009	6,572	18,581	4.16
Other mill products.....	3,074	832	4,006	.80
Hay.....	9,935	3,680	13,615	3.05
Fruit and vegetables.....	31,268	10,443	41,711	9.34
<b>Products of animals:</b>				
Live stock.....	12,533	2,703	15,238	3.41
Dressed meats.....	423	9	432	.10
Other packing house products.....	187		187	.05
Poultry, game and fish.....	368	46	414	.09
Wool.....	439	83	522	.12
Hides and leather.....	1,228	887	2,115	.47
<b>Products of mines:</b>				
Anthracite coal.....		17,949	17,949	4.02
Bituminous coal.....	370	32,252	32,622	7.30
Charcoal.....	72	245	317	.07
Stone, sand, and other like articles.....	2,786	373	3,159	.71
Salt.....	6,999	129	7,128	1.60
<b>Products of forest:</b>				
Lumber.....	139,729	27,109	166,838	37.36
<b>Manufactures:</b>				
Petroleum and other oils.....	2,916	1,442	4,358	.98
Iron, pig and bloom.....	19	179	198	.04
Iron and steel rails.....	362		362	.08
Other castings and machinery.....	2,823	3,116	5,939	1.33
Bar and sheet metal.....	88	60	148	.03
Cement, brick and lime.....	5,919	3,700	9,619	2.16
Agricultural implements.....	1,442	1,280	2,722	.61
Wagons, carriages, tools, etc.....	1,649	114	1,763	.39
Wines, liquors and beers.....	1,229	730	1,959	.44
Household goods and furniture.....	10,121	6,689	16,810	3.76
<b>Merchandise.....</b>	<b>23,579</b>	<b>6,065</b>	<b>29,644</b>	<b>6.64</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	16,532	3,048	19,580	4.38
<b>Total tonnage.....</b>	<b>314,079</b>	<b>132,527</b>	<b>446,606</b>	<b>100.00</b>

## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The American Express Co. at an agreed rate. They handle their own freight at the railroad company's depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

673.38. D., L. & N. R. R.

32.19. Western Union Telegraph Co.



# DETROIT, LANSING & NORTHERN RAILROAD COMPANY. 181

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE NINE MONTHS ENDING DECEMBER 31, 1896.

### KILLED.

April 17, Oliver Warner, citizen, McCords. Team frightened at cars and ran over deceased; accidental.  
 May 26, James Wills, citizen, Plymouth. Train frightened horse; accidental.  
 June 27, Charles Laaber, citizen, Redford. Trespassers on track; struck by F. & P. M. train.  
 September 5, Ed. Ross, brakeman, Portland. Crushed between cars; accidental.  
 September 16, Frank Frost, engineer, Fowlerville. Collision; crew asleep; neglected orders.  
 October 27, Robert Patterson, citizen, Ionia. Trespasser; struck by hand car.  
 December 1, Alice Taft, F. May Luce, citizens, Lyons. Struck at crossing; accidental.  
 December 10, J. W. Younger, citizen, Portland. Fall from train; accidental.

### INJURED.

April 10, Charles Williams, citizen, Sunfield. Climbing between cars; trespasser.  
 June 17, Mrs. S. Welch, citizen, Lakeview. Struck at crossing; accidental.  
 July 16, John E. Bourn, brakeman, Howard City. Alighting from moving train.  
 September 16, H. Bailey, engineer, F. H. Williams, Fireman, A. V. Broderick, brakeman, Fowlerville.  
 Collision; crew asleep; neglected orders.  
 September 14, Patrick Kennedy, fireman, Okemos. Collision; mistaking written order.  
 October 15, E. S. Wright, citizen, Elmdale. Foot hurt between bumpers while cars were being coupled.  
 November 21, Frank Lett, citizen, Grand Rapids. Stealing ride on train; fell off; trespasser.  
 December 1, Anna Taft, citizen, Lyons. Struck at crossing; accidental.

### TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....		1			4	
Falling from trains.....	1					
Getting on and off trains.....				1		
Highway crossings.....			2			2
Miscellaneous.....		1	2	1		
Trespassers on trains.....						2
Trespassers on tracks.....			2			
Total.....	1	2	6	1	5	4

### SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the nine months .....	9
Number of persons injured during the nine months .....	10
Number of casualties purely accidental.....	10
Number resulting from lack of caution, carelessness or misconduct.....	9
Trespassers and tramps killed or injured.....	4

### CLASSIFICATION OF EMPLOYÉS.

#### KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Brakemen.....	1	2	3
Engineers.....	1	1	2
Firemen.....		2	2
Total.....	2	5	7

STATE OF MICHIGAN, } ss.  
COUNTY OF KENT,

Charles M. Heald, receiver, and U. B. Rogers, auditor, of the Detroit, Lansing & Northern railroad company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. of R. R.]

Signed,

CHAS. M. HEALD,  
U. B. ROGERS.

Subscribed and sworn to before me this 17th day of April, A. D. 1897.

[L. S.]

ERNEST N. WELLER,  
*Notary Public, Kent Co., Michigan.*

**THREE MONTHS' REPORT**  
**OF THE**  
**GRAND RAPIDS, LANSING & DETROIT RAILROAD COMPANY,**

*For the three months ending March 31, 1896.*

[Filed April 19, 1897.]

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**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President*, NATHANIEL THAYER, Boston, Mass.  
*Secretary*, CHARLES MERRIAM, Boston, Mass.  
*Treasurer*, CHARLES MERRIAM, Boston, Mass.  
*General Manager*, CHAS. M. HEALD, Grand Rapids, Mich.

**DIRECTORS.**

NATHANIEL THAYER, Boston, Mass.  
 CHARLES MERRIAM, Boston, Mass.  
 GEO. SHATTUCK, Boston, Mass.  
 A. H. HARDY, Boston, Mass.  
 H. H. HUNNEWELL, Boston, Mass.  
 F. H. DAMON, Boston, Mass.  
 CHAS. M. HEALD, Grand Rapids, Mich.

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: May 17, 1887.  
 Number of stockholders at date of last election: 8.  
 Number of stockholders in Michigan at same date: 1.  
 Amount of full paid stock held in Michigan at same date: \$100 00.  
 Date of annual meeting of stockholders: Second Wednesday in May.  
 Fiscal year of company ends December 31.  
 General offices of the company are located at Boston, Mass., and Grand Rapids, Mich.

**REMARKS:**

This road is leased and operated by the Detroit, Lansing & Northern R. R. Co.

**ANALYSIS OF CAPITAL STOCK.**

Amount authorized by charter or articles of association.....		\$450,000 00
Par value of shares.....	\$100 00	
Average price received per share.....	100 00	
Amount paid in on common.....	\$28,000 00	
Total amount paid in, as per books of the company.....		28,000 00
Paid in per mile of road owned by company, 55.54 miles.....		<u>\$504 14</u>

## MICHIGAN RAILROAD RETURNS, 1896.

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount out-standing.
First mortgage bonds, Sep. 1, 1887.....	5%	Sep. 1, 1927 .....	Boston, Mass.....	\$1,108,000 00

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated.	Amount.
For construction.....	} To be paid.....	\$167,636 27
For equipment.....		

## RECAPITULATION.

Total funded debt .....	\$1,108,000 00
Total unfunded debt .....	167,636 27
Total debt liabilities.....	\$1,275,636 27
Amount of debt liabilities per mile of road, 55.54 miles .....	22,967 88
Total amount of stock and debt.....	1,303,636 27
Stock and debt per mile of road.....	23,472 02

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year .....	\$55,400 00
Was it paid for the last year? No.	
If interest is in default state the years and amounts as follows :	
Default 1893.....	27,700 00
Default 1894.....	55,400 00
Default 1895.....	55,400 00
Default 1896.....	27,700 00

## COST OF ROAD AND EQUIPMENT.

## TOTAL COST FOR CONSTRUCTION AND EQUIPMENT OF ROAD AND BRANCHES BUILT BY COMPANY.

Total expended for construction and equipment.....	\$1,303,636 27
Average cost of construction per mile of road (not including sidings) 55.54 miles.....	23,472 02
Proportion of cost of construction for Michigan.....	1,303,636 27

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini: August, 1888.

## MAIN LINE.

Length completed in Michigan, Grand Ledge to Grand Rapids.....	53.01
Total length completed .....	53.01

## BRANCHES.

Reed's Lake, from Oakdale Park to Reed's Lake.....	2.53
Total length of branches owned by company.....	2.53
Total length of branches owned by company in Michigan .....	2.53
Total length of road belonging to this company.....	55.54
Total length of road belonging to this company in Michigan .....	55.54
Aggregate length of sidings, spurs and other tracks not above enumerated.....	10.77
Same in Michigan.....	10.77
Aggregate length of tracks in Michigan belonging to this company, computed as single track.....	66.31
Same in Michigan.....	66.31
Gauge of track, 4 feet 8½ inches.	

STATE OF MASSACHUSETTS, } ss.  
COUNTY OF SUFFOLK,

Nathaniel Thayer, president, and Charles Merriam, secretary, of the Grand Rapids, Lansing & Detroit Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the stock and debt and other matters therein contained of said company, on the thirty-first day of March, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

N. THAYER, *President*,  
CHAS. MERRIAM, *Secretary*.

Subscribed and sworn to before me this 15th day of April, A. D. 1897.

F. H. DAMON,  
*Notary Public*.

**THREE MONTHS' REPORT**  
**OF THE**  
**SAGINAW & WESTERN RAILROAD COMPANY**

*For the three months ending March 31, 1896.*

[Filed April 24, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President*, NATHANIEL THAYER, Boston, Mass.  
*Secretary*, JAMES E. HOWARD, Grand Rapids, Mich.  
*Treasurer*, JAMES E. HOWARD, Grand Rapids, Mich.

**DIRECTORS.**

NATHANIEL THAYER, Boston, Mass.  
 E. V. E. THAYER, Boston, Mass.  
 CHAS. F. ADAMS, Boston, Mass.  
 CHAS. MERRIAM, Boston, Mass.  
 GEO. O. SHATTUCK, Boston, Mass.  
 A. H. HARDY, Boston, Mass.  
 G. ST. L. ABBOTT, Boston, Mass.  
 J. A. BURNHAM, Boston, Mass.  
 CHAS. M. HEALD, Grand Rapids, Mich.  
 Terms expire July 8, 1896.

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: June 7, 1883.  
 Number of stockholders at date of last election: 8.  
 Number of stockholders in Michigan at same date, 1.  
 Amount of full paid stock held in Michigan at same date: \$100.00.  
 Date of annual meeting of stockholders: Second Wednesday in July.  
 Fiscal year of company ends: December 31.  
 General offices of the company are located at Grand Rapids, Mich.

**REMARKS.**

This road is leased for thirty years from July 1, 1883, to the Detroit, Lansing and Northern Railroad Company, that company paying the interest on the bonds and a dividend of seven (7) per cent per annum on the stock of this company as rental.

**ANALYSIS OF CAPITAL STOCK.**

Amount authorized by charter or articles of association .....	\$675,000 00
Par value of shares.....	\$100 00
Average price received per share.....	100 00
Number of shares issued.....	45
Amount paid in on common.....	\$4,500 00
Total amount paid in, as per books of the company.....	\$4,500 00
Paid in per mile of road owned by company, 42.57 miles.....	105 71

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage bonds, 1883 .....	6%	1913	Boston, Mass. ....	\$566,000 00

## RECAPITULATION.

Total funded debt .....	\$566,000 00
Total debt liabilities .....	566,000 00
Amount of debt liabilities per mile of road, 42.57 miles .....	13,295 75
Total amount of stock and debt .....	570,500 00
Stock and debt per mile of road .....	13,401 46

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year .....	\$33,960 00
Was it paid for the last year? No.	
If interest is in default state the years and amounts as follows:	
In default 1893 .....	\$16,980 00
In default 1894 .....	33,960 00
In default 1895 .....	33,960 00
In default 1896 .....	16,980 00

## COST OF ROAD AND EQUIPMENT.

## TOTAL COST FOR CONSTRUCTION AND EQUIPMENT OF ROAD AND BRANCHES BUILT BY COMPANY.

Total expended for construction and equipment .....	\$568,586 65
Average cost of construction per mile of road (not including sidings), 42.57 miles .....	13,356 51
Proportion of cost of construction for Michigan .....	568,586 65

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
 August, 1886.

## MAIN LINE.

Length completed in Michigan, Alma to Howard City .....	42.57
Total length of road belonging to this company in Michigan .....	42.57
Aggregate length of sidings, spurs, and other tracks not above enumerated .....	10.57
Aggregate length of tracks belonging to this company, computed as single track .....	53.14
Gauge of track, 4 feet 8½ inches.	

STATE OF MASSACHUSETTS, } ss.  
 COUNTY OF SUFFOLK, }

Nathaniel Thayer, president, and James E. Howard, secretary, of the Saginaw & Western Railroad Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full and correct statement of the stock, debt and other matters as therein contained of said company, on the thirty-first day of March, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

N. THAYER, President.

JAMES E. HOWARD, Secretary.

Subscribed and sworn to before me this 22d day of April, A. D. 1897.

[L. S.]

By N. THAYER.

J. H. DAMON.

Notary Public.

STATE OF MICHIGAN, } ss.  
 COUNTY OF KENT, }

Subscribed and sworn to before me this 13th day of April, A. D., 1897, as to J. E. Howard.

[L. S.]

ERNEST W. WELLER,

Notary Public, Kent County, Michigan.

**ANNUAL REPORT**  
OF THE  
**DETROIT & MACKINAC RAILWAY COMPANY,**

*For the year ending December 31, 1896.*

[Filed April 23, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President*, J. D. HAWKS, Detroit, Mich.  
*Vice President*, GEO. M. CROCKER, Detroit, Mich.  
*Secretary*, A. H. GILLARD, New York City.  
*Auditor*, GEO. M. CROCKER, Detroit, Michigan.  
*Treasurer*, J. H. EMANUEL, JR. New York City.  
*General Manager*, J. D. HAWKS, Detroit, Mich.  
*General Superintendent*, C. W. LUCE, East Tawas, Mich.  
*Chief Engineer*, D. J. CAREY, Bay City, Mich.  
*Cashier*, J. H. MOUNT, Detroit, Mich.  
*General Passenger and Freight Agent*, T. G. WINNETT, Bay City, Mich.  
*General Counsel*, DON M. DICKINSON, Detroit, Mich.

**DIRECTORS.**

C. H. COSTER, New York City.  
E. N. GIBBS, New York City.  
N. J. THOMAS, New York City.  
H. B. HOLLINS, New York City.  
J. D. HAWKS, Detroit, Mich.

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: December 29, 1894.  
Number of stockholders at date of last election: 5.  
Number of stockholders in Michigan at same date: 1.  
Date of annual meeting of stockholders: Last Tuesday in October.  
Fiscal year of company ends June 30.  
General offices of the company are located at Detroit, Michigan.

**GENERAL EXHIBIT.**

	Debit.	Credit.
Total earnings from operation .....		\$400,622 86
Total expenses, including taxes .....	\$281,102 23	
Net income .....		\$119,520 63
Interest on funded debt .....	116,000 00	
Balance for the year .....	\$3,520 63	
Balance (loss) last year .....	135,285 91	
		\$138,756 54
Items not included in above, as follows:		
Construction and equipment, charged to income .....	\$55,683 19	
Old accounts charged off .....	3,782 82	
Balance forward to next year .....		59,466 01
		\$79,280 53



## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$3,000,000 00
Par value of shares.....	\$100 00	
Number of shares issued.....	20,450	
Amount paid in on common.....	\$2,000,000 00	
Amount paid in on preferred.....	45,000 00	
Total amount paid in, as per books of the company.....		2,045,000 00
Paid in per mile of road owned by company, 296.4 miles.....		6,399 48

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First lien bonds, May 1, 1895.....	4%	June 1, 1895.....	New York.....	\$900,000 00
Mortgage bonds, May 1, 1895.....	4%	June 1, 1895.....	New York.....	2,000,000 00
Total funded debt.....				\$2,900,000 00

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated.	Amount.
For current balances.....		\$191,335 69

## RECAPITULATION.

Total funded debt.....	\$2,900,000 00
Total unfunded debt.....	191,335 69
Total debt liabilities.....	\$3,091,335 69
Amount of debt liabilities per mile of road, 296.4 miles.....	10,429 61
Total amount of stock and debt.....	5,136,335 69
Stock and debt per mile of road, 296.4 miles.....	17,329 07

## GENERAL BALANCE SHEET.—Dr.

Construction account.....	\$4,666,335 47
Equipment account.....	311,817 18
Other investments:	
J. P. Morgan & Co., trust accounts.....	115,002 97
J. P. Morgan & Co., coupon accounts.....	43,000 00
	\$5,136,155 62
Cash items:	
Cash.....	\$28,213 56
Bills receivable.....	4,676 61
Due from agents.....	8,985 61
	36,875 78
Other assets:	
Materials and supplies.....	\$25,801 62
Debit balances from companies and individuals.....	16,793 20
	42,594 82
Total.....	\$5,215,626 22

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$2,000,000 00	
Funded debt.....	2,900,000 00	
Preferred stock.....	45,000 00	
	<hr/>	\$4,945,000 00
Unfunded debt:		
Vouchers and accounts.....	\$19,888 76	
Other liabilities (list as follows):		
Balance due on purchase of Alpena & Northern R. R. ....	171,446 98	
	<hr/>	191,335 69
Profit and loss or income accounts.....		79,290 53
	<hr/>	
Total.....		<u>\$5,215,626 22</u>

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction and equipment .....	\$4,978,152 65
Average cost per mile of road (not including sidings), 296.4 miles.....	<u>16,695 39</u>

## ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

Main line and branches:		
Local fares.....	\$75,412 61	
Express and baggage.....	1,749 22	
Mails.....	13,339 22	
	<hr/>	
Total passenger department earnings.....		\$90,501 05
Per train mile.....	\$0 59	
Per mile of road.....	305 33	

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic.....	\$307,946 96	
	<hr/>	
Total freight department earnings.....		307,946 96
Per train mile.....	\$1 24	
Per mile of road.....	1,088 96	
	<hr/>	
Total transportation earnings, entire line .....		\$398,448 01
Transportation earnings per mile of road.....	\$1,344 29	
Transportation earnings per train mile .....	1 00	
Miscellaneous receipts from operating account, other than for transportation.....		2,174 85
	<hr/>	
Total.....		<u>\$400,622 86</u>

Distribution of miscellaneous earnings between main line and leased or proprietary roads:

	Total miscellaneous.	Proportion for Michigan
Less earnings on Alpena and Northern Division.....	\$146,752 94	
Less earnings on 18 miles of main line, south of Emery Junction, built in 1896.....	6,724 75	
	<hr/>	\$153,477 69
Total earnings per mile of road, 296.4 .....	\$1,351 63	
Total earnings per train mile, 401,600.....	1 00	
Proportion of taxable earnings for Michigan.....		\$247,145 17
Total taxable earnings per mile of road in Michigan.....	838 82	
	<hr/>	<hr/>

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway.....	\$35,296 65
Renewals of rails.....	83,322 35
Renewals of ties.....	7,946 85
Repairs and renewals of bridges and culverts.....	1,276 43
Repairs and renewals of fences, road crossings, signs and cattle guards.....	3,167 20
Repairs and renewals of buildings and fixtures.....	2,175 84
Repairs and renewals of telegraph.....	728 90
Stationery and printing.....	30 93
Other expenses.....	2,322 06
<b>Total.....</b>	<b>\$86,206 71</b>

## MAINTENANCE OF EQUIPMENT.

Superintendence.....	
Repairs and renewals of locomotives.....	\$12,124 76
Repairs and renewals of passenger cars.....	2,424 66
Repairs and renewals of freight cars.....	13,579 49
Repairs and renewals of work cars.....	756 77
Repairs and renewals of shop machinery and tools.....	759 96
Stationery and printing.....	33 20
Other expenses.....	6,410 08
<b>Total.....</b>	<b>\$36,088 92</b>

## CONDUCTING TRANSPORTATION.

Superintendence.....	\$2,736 04
Engine and roundhouse men.....	25,221 71
Fuel for locomotives.....	87,260 90
Water supply for locomotives.....	2,736 08
Oil, tallow and waste for locomotives.....	2,494 84
Other supplies for locomotives.....	306 69
Train service.....	24,533 09
Train supplies and expenses.....	1,469 11
Switchmen, flagmen and watchmen.....	803 22
Telegraph expenses.....	715 89
Station service.....	12,736 22
Station supplies.....	619 29
Car mileage—balance.....	3,767 85
Loss and damage.....	2,178 87
Injuries to persons.....	55 10
Clearing wrecks.....	108 96
Advertising.....	969 37
Stationery and printing.....	1,320 93
Other expenses.....	2,568 65
<b>Total.....</b>	<b>\$122,601 81</b>

## GENERAL EXPENSES.

Salaries of general officers.....	\$15,600 00
Salaries of clerks and attendants.....	10,520 95
General office expenses and supplies.....	2,257 74
Law expenses.....	1,223 90
Stationery and printing (general offices).....	699 71
Other expenses.....	1,907 75
Taxes.....	4,014 74
<b>Total.....</b>	<b>\$36,204 79</b>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	30.67	\$86,206 71
Maintenance of equipment.....	12.84	36,088 92
Conducting transportation.....	43.61	122,601 81
General expenses, including taxes.....	12.88	36,204 79
<b>Total operating expenses and taxes.....</b>	<b>100.00</b>	<b>\$281,102 23</b>
Operating expenses and taxes per mile of road.....		\$948 12
Operating expenses and taxes per train mile run, for trains, earning revenue, 401,600 miles.....		70
Percentage of expenses to earnings.....	70.19	
Net earnings per mile of road.....		408 24
Net earnings per train mile.....		30

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Bay City, Michigan, to La Roque City, Michigan, September 20, 1896.

## MAIN LINE.

	Miles.
In Michigan, from Bay City to La Roque .....	180.10
Total length completed .....	180.10

## BRANCHES.

Rose City, from Emery Junction to Rose City .....	31.80
Prescott, from Emery Junction to Prescott .....	11.80
Mud Lake, from Mud Lake Junction to Pritchards .....	6.
Valentine Lake, from La Roque to Valentine Lake .....	25.70
Logging branches .....	61.
Total length of branches owned by company in Michigan .....	136.30
Total length of road belonging to this company in Michigan .....	296.40
Aggregate length in Michigan of sidings, spurs and other tracks not above enumerated .....	30.
Aggregate length of tracks in Michigan belonging to this company, computed as single track .....	326.40

Gauge of track, 4 feet 8½ inches.

If north of parallel 44 of latitude:

Give date road commenced to be built:  
Alpena & Northern, May, 1893; main line, 1896.

Give date road completed:  
Alpena & Northern, September 23, 1894; main line, 1896.

Give date road commenced to be operated:  
Alpena & Northern, November 18, 1893; main line, September 20, 1896.

Where built from and to:  
Alpena & Northern from Alpena to Jackson Lake; main line south from Emery Junction.

Give exact number of miles:  
Alpena & Northern 54.70 miles; main line 18 miles.

## Number of bridges and trestles in Michigan.

	Number.	Aggregate length, feet.
Wooden bridges .....	4	764
Iron bridges .....	8	1,553
Combination bridges .....	1	477
Wooden trestles .....	25	2,352
Total .....	38	5,146

## Draw bridges in Michigan.

How many on your line?  
One.

Where located, when built and length of draw span?  
Bay City, 1896; 220 feet; over Saginaw river.

Character of structure?  
Truss.

Material of which constructed.  
Steel.

Height above water, and depth of water under bridge.  
12 feet and 32 feet.

How swung, by engine or hand power?  
Hand power.

Approaches straight or curved?  
Curved.

Do you require all trains to come to full stop before crossing a draw, and how are they signaled?  
Yes. Red and white signals.

*Crossings.—Railroad and highway.*

What railroads cross your road at grade in this State, and at what locality?

Au Sable & Northwestern R. R. at Au Sable.  
Michigan Central R. R. at Pinconning.  
Grand Trunk R'y at North Bay City.

At what crossings are interlocking and derailling switches in operation?

Au Sable and Northwestern R. R. at Au Sable.  
Michigan Central R. R. at Pinconning.  
Grand Trunk R'y at North Bay City.

What pattern or patterns have you adopted?

Union Switch & Signal Company's.

Number of crossings of highways at grade in this State..... 183

Are your frogs and guard rails blocked as required by act 174, session laws of 1883?

Yes.

How are they treated?

With wooden blocks.

*Stations.*

Number of stations on whole lines..... 53

*Employés.*

Number of persons regularly employed on all roads operated by company, including officials..... 331

Classify your employés as per following list:

Number.

Baggagemen.....	5
Brakemen.....	32
Conductors.....	14
Engineers.....	17
Firemen.....	17
Laborers.....	133
Shopmen.....	61
Yardmen.....	2
Others.....	50

*REPAIRS AND RENEWALS.**Fencing in Michigan.*

How many miles of fencing have you?..... 130.5

*Road bed and track.*

Number of track sections in Michigan.....	32
Average lengths of sections, miles.....	9
Average number of men in each section gang.....	4
Number of new ties put in track in Michigan.....	41,596
Average number of new ties per mile of road, 296.4.....	140

New bridges built during the year—Number, 8.

Location.	Kind.	Material.	Month built.	Feet in length.
Au Gres river.....	Truss and trestle.....	Wood.....	January.....	176
Rifle river.....	Through girder.....	Steel.....	February.....	110
Pine river.....	Plate ".....	".....	June.....	110
Saginaw river.....	" ".....	".....	July.....	60
Pinconning river.....	" ".....	".....	".....	60
Kawawlin river.....	" ".....	".....	October.....	105
Saginaw river.....	Truss.....	".....	August.....	672
Tobico bay.....	Pile trestle.....	Wood.....	".....	144

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender.....	19	\$95,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender.....	1	8,000 00
Total.....	20	\$96,000 00
Number of passenger cars—12-wheel, including official cars.....	1	\$7,200 00
Number of passenger cars—8-wheel, including official cars.....	8	19,250 00
Number of express and baggage cars.....	6	7,440 00
Number of box freight cars.....	95	33,000 00
Number of platform cars.....	351	93,250 00
Number of conductors' way cars.....	5	2,150 00
Other cars as follows:		
Timber trucks.....	250	16,250 00
Derrick.....	1	1,800 00
Flanger.....	1	350 00
Total.....	743	\$187,690 00
Number of locomotives equipped with power brakes.....		20
Number of passenger-train cars equipped with power brakes.....		14
Number of freight cars equipped with power brakes.....		160

What patterns of power brakes have you in use, and number of locomotives and cars with each?  
 Westinghouse, 6 locomotives, 14 passenger cars, 160 freight cars.  
 American, 14 locomotives.

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?  
 Yes.

What pattern or patterns have you adopted for use?  
 Gould.

How are your passenger cars heated?  
 Smith & Owen and Baker hot water.

## MILEAGE, TRAFFIC, ETC.

## Train mileage.

	In Michigan.
Miles run by passenger trains during the year.....	137,400
Miles run by freight trains during the year.....	230,210
Miles run by mixed trains.....	63,990
Total mileage of trains earning revenue.....	401,600

## Passenger traffic.—Road all in State of Michigan.

	Number.	Miles.	Rate.
Total number of passengers carried, earning revenue.....	73,207		
Number of passengers carried one mile.....	3,278,209	44.78	
Average distance carried.....			\$1 03
Average amount received from each passenger.....			02.03
Average receipts per passenger per mile for all passengers.....			

## Freight traffic.—Road all in State of Michigan.

	Tons.	Miles.	Rate.
Number of tons of local freight carried, earning revenue.....	433,836		
Total mileage of local freight.....		249,200	
Total freight mileage or tons carried one mile.....	16,435,769	38	
Average ton haul for local freight.....			\$0 71
Average amount received for each ton haul.....			02
Average receipts ton per mile, for local freight.....			

## FREIGHT TRAFFIC MOVEMENT.—ROAD ALL IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....			1,750	.40
Flour.....			1,520	.32
Other mill products.....			535	.12
Hay.....			2,040	.57
Fruit and vegetables.....			170	.04
Potatoes.....			313	.07
<b>Products of animals:</b>				
Live stock.....			2,090	.58
Dressed meats.....			805	.19
Hides and leather.....			2,514	.75
<b>Products of mines:</b>				
Bituminous coal.....			1,878	.42
Stone, sand and other like articles.....			2,190	.63
Salt.....			494	.11
<b>Products of forest:</b>				
Lumber.....			61,720	14.28
Logs.....			250,891	57.00
Shingles.....			80,530	18.38
<b>Manufactures:</b>				
Petroleum and other oils.....			440	.10
Iron, pig and bloom.....			1,860	.42
Other castings and machinery.....			2,638	.62
Cement, brick and lime.....			13,870	3.20
<b>Merchandise.....</b>			658	.15
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....			4,900	1.15
<b>Total tonnage.....</b>			<b>438,896</b>	<b>100.00</b>

## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Co. 40% of gross revenue. Freights taken at depot.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

138 miles. Western Union Telegraph Co.

*Fast freight lines.*

To what fast freight lines, or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

Name of company.	General office.	Amount paid.
Blue Line.....	Rochester, N. Y.....	\$526 33
Canada Southern Line.....	Rochester, N. Y.....	210 59
Swift Refrigerator Transportation Co.....	Chicago, Ill.....	91 12
George H. Hammond Co.....	Hammond, Ind.....	84 01
Burton Stock Car Co.....	Boston, Mass.....	7 87
Merchants' Despatch Transportation Co.....	New York, N. Y.....	94 80
Empire Line.....	Philadelphia, Pa.....	15 46
National Car Co.....	St. Albans, Vt.....	21 01
White Line Central Transit Co.....	Buffalo, N. Y.....	2 98
Canadian Pacific Despatch.....	Boston, Mass.....	3 87
Red Line Transit Co.....	Buffalo, N. Y.....	9 55
Union Tank Line.....	New York, N. Y.....	3 52
Provision Dealers' Despatch.....	Chicago, Ill.....	6 30
Pearcy Grain Line Co.....	Minneapolis, Minn.....	1 75
Pittsburg Plate Glass Co.....	Pittsburg, Pa.....	1 26
J. E. B. Furniture Line.....	Atlanta, Ga.....	96
Mather Horse & Stock Car Co.....	Chicago, Ill.....	2 57
Morris Coal and Transportation Co.....	Cleveland, O.....	23 65
Chicago Refrigerator Car Line.....	Chicago, Ill.....	5 50
American Refrigerator Transit Co.....	St. Louis, Mo.....	91
Kansas City Dressed Beef Line.....	Kansas City, Mo.....	1 96

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

## KILLED.

August 5, Mike Dwyer, lumberman, Hurst. Trespasser; company not responsible.

## INJURED.

August 20, Peter Rose, section foreman, Black River. Carelessness.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Pas-sengers.	Employés.	Others.	Pas-sengers.	Employés.	Others.
Highway crossings.....					1	
Trespassers on trains.....			1			
Total.....			1		1	

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year.....	1
Number of persons injured during the year.....	1
Number resulting from lack of caution, carelessness, or misconduct.....	1
Trespassers and tramps killed or injured.....	1



## CLASSIFICATION OF EMPLOYÉS.

KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Laborers .....	-----	1	-----
Total .....	-----	1	-----

STATE OF MICHIGAN, } ss.  
COUNTY OF WAYNE, }

Jas. D. Hawks, president, and George M. Crocker, auditor of the Detroit & Mackinac Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

JAMES D. HAWKS,  
GEORGE M. CROCKER.

Subscribed and sworn to before me this 22d day of April, A. D. 1897.

[L. S.]

NICHOLAS J. FLEMING,  
Notary Public, Wayne County, Michigan.

**ANNUAL REPORT**  
**OF THE**  
**DETROIT & MACKINAC RAILWAY COMPANY,**  
**[ ALPENA & NORTHERN DIVISION, ]**

*For the year ending December 31, 1896.*

[Filed April 23, 1897.]

**COST OF ROAD AND EQUIPMENT.**

PURCHASED BY PRESENT COMPANY.

When purchased by present company:  
 April 16, 1896.

Original cost to present company of road and equipment.....	<u>\$225,000 00</u>
-------------------------------------------------------------	---------------------

**ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.**

Main line and branches:		PASSENGER EARNINGS.	
Local fares.....		\$11,984 70	
Mails.....		1,108 32	
Total passenger department earnings.....			<u>\$13,093 02</u>

Main line and branches:		FREIGHT EARNINGS.	
Local traffic.....		\$123,599 92	
Total freight department earnings.....			<u>123,599 92</u>
Total transportation earnings entire line ..			<u>\$146,692 94</u>
From other sources .....			<u>60 00</u>
Total.....			<u>\$146,752 94</u>

**DESCRIPTION OF ROAD.**

MAIN LINE.	Miles.	Miles.
In Michigan, from Alpena to La Roque.....		29.

BRANCHES.		
Valentine Lake, from La Roque to Valentine Lake .....	25.70	
Others .....	30.	
Total length of branches owned by company .....		<u>55.70</u>
Total length of road belonging to this company .....		<u>84.70</u>
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated ..		7.05
Aggregate length of tracks in Michigan belonging to this company computed as single track .....		<u>91.75</u>

Gauge of track, 4 feet 8½ inches.

If north of parallel 44 of latitude:

Yes.

Give date road commenced to be built:

May, 1893.

Give date road completed:

September 23, 1894.

Give date road commenced to be operated:

November 1893.

Where built from and to:

Alpena to La Roque.

Give exact number of miles:

84.7.

STATE OF MICHIGAN, } ss.  
COUNTY OF WAYNE, }

James D. Hawks, President, and George M. Crocker, auditor of the Detroit & Mackinac Railway Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF P. R.]

Signed,

JAMES D. HAWKS,

GEORGE M. CROCKER.

Subscribed and sworn to before me this 22d day of April A. D. 1897.

[L. S.]

NICHOLAS J. FLEMING,

Notary Public, Wayne County, Mich.

**ANNUAL REPORT**  
**OF THE**  
**DETROIT & MACKINAC RAILWAY COMPANY,**  
**[EMERY JUNCTION TO PARALLEL 44 OF LATITUDE,]**

*For the year ending December 31, 1896.*

[Filed April 23, 1897.]

**ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.**

**PASSENGER EARNINGS.**

Main line and branches:	
Total passenger department earnings.....	\$1,344 96

**FREIGHT EARNINGS.**

Main line and branches:	
Total freight department earnings.....	5,379 80
Total transportation earnings, entire line.....	\$6,724 75

**DESCRIPTION OF ROAD.**

**MAIN LINE.**

	<b>Miles.</b>
In Michigan, from Emery Junction to Parallel 44.....	18

If north of parallel 44 of latitude:  
Yes.

Give date road commenced to be built:  
1896.

Give date road completed:  
1896.

Give date road commenced to be operated:  
September 20, 1896.

Where built from and to:  
Emery Junction to parallel 44.

Give exact number of miles:  
18.

STATE OF MICHIGAN, } ss.  
COUNTY OF WAYNE, }

James D. Hawks, President, and George M. Crocker, Auditor of the Detroit & Mackinac Railway Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF E. E.]

Signed,

JAMES D. HAWKS,  
GEORGE M. CROCKER.

Subscribed and sworn to before me this 22d day of April, A. D. 1897.

NICHOLAS J. FLEMMING,  
Notary Public, Wayne County, Mich.

ANNUAL REPORT  
OF THE  
DULUTH, SOUTH SHORE & ATLANTIC RAILWAY COMPANY,

*For the year ending December 31, 1896.*

[Filed April 5, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, GEN. SAMUEL THOMAS, New York, N. Y.  
*First Vice President*, HON. CALVIN S. BRICE, New York, N. Y.  
*Second Vice President*, SIR WILLIAM C. VAN HORNE, Montreal, Canada.  
*Secretary*, GEO. H. CHURCH, New York, N. Y.  
*Auditor*, A. E. DELF, Marquette, Mich.  
*Treasurer*, E. W. ALLEN, Marquette, Mich.  
*General Manager*, WM. F. FITCH, Marquette, Mich.  
*Superintendent*, C. E. LYTLE, Marquette, Mich.  
*Division Superintendents*, { A. M. SUTHERLAND, Thomaston, Mich.  
                                  { F. E. KETCHUM, Marquette, Mich.  
*Chief Engineer*, H. J. PAYNE, Marquette, Mich.  
*General Passenger Agent*, GEO. W. HIBBARD, Marquette, Mich.  
*General Freight Agent*, WM. ORR, Duluth, Minn.  
*Attorney*, A. B. ELDBEDGE, Marquette, Mich.

DIRECTORS.

GEN. SAMUEL THOMAS, New York, N. Y.  
HON. CALVIN S. BRICE, New York, N. Y.  
SIR DONALD A. SMITH, Montreal, Canada.  
SIR WILLIAM C. VAN HORNE, Montreal, Canada.  
THOS. G. SHAUGHNESSY, Montreal, Canada.  
JAS. O. BLOSS, New York, N. Y.  
JOHN W. STEELING, New York, N. Y.  
WALTER WATSON, New York, N. Y.  
THOS. W. PEARSELL, New York, N. Y.  
GEO. H. CHURCH, New York, N. Y.  
WILLIAM F. FITCH, Marquette, Mich.

Terms expire June 3, 1897.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: March 7, 1887.  
Number of stockholders at date of last election: 310.  
Number of stockholders in Michigan at same date: 15.  
Amount of full paid stock held in Michigan at same date: 9,840 shares.  
Date of annual meeting of stockholders: First Tuesday in June.  
Fiscal year of company ends December 31.  
General offices of the company are located at Marquette, Mich.

## GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$1,905,810 63
Total expenses including taxes .....	\$1,278,142 14	
Net income.....		\$682,668 39
Interest on funded debt.....	\$361,098 34	
Interest on unfunded debt.....	856 47	
Balance for the year.....	229,286 43	
Balance (profit and loss) last year.....	980,775 43	
Items not included in above.....		32,402 20
Balance forwarded to next year .....		1,177,659 65

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....	\$23,000,000 00
Par value of shares.....	\$100 00
Number of shares issued.....	220,000
Amount paid in on common.....	\$12,000,000 00
Amount paid in on preferred.....	10,000,000 00
Total amount paid in, as per books of the company.....	\$22,000,000 00
Paid in per mile of road owned by company 571.71 miles.....	38,481 05

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
D., S. S. & A. first mort'g, Jan. 1, 1887.....	5%	Jan. 1, 1937.....	New York, N. Y. ....	\$3,947,000 00
D., S. S. & A., first consols., July 17, 1890.....	4%	Aug. 1, 1930.....	New York, N. Y. ....	14,878,000 00
M., H. & O., 6% mort'g bonds Apr. 1, 1885.....	6%	April 1, 1925.....	New York, N. Y. ....	1,077,000 00
D., S. S. & A. 20 year income certificates, Dec. 31, 1892.....	4%	Dec. 31, 1912.....	New York, N. Y. ....	3,000,000 00
Car trust notes of Feb. 6, 1894.....	none.	Dec. 1, 1905.....	Toronto, Ont. ....	71,384 54
Car trust notes of Oct. 2, 1895.....	none.	Oct. 1, 1905.....	Toronto, Ont. ....	91,792 85
Car trust notes of Feb. 3, 1896.....	none.	Feb. 1, 1906.....	Toronto, Ont. ....	279,050 53
Car trust notes of April 2, 1896.....	none.	April 1, 1906.....	Montreal, Que. ....	236,213 19
Total funded debt.....				\$23,678,451 24

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For construction.....		\$86,500 00
For equipment.....		19,000 00
For accrued interest on bonds.....		265,755 00
For miscellaneous.....		3,121,743 12
For current balances.....		396,508 51
Total unfunded debt.....		\$3,889,501 63

## RECAPITULATION.

Total funded debt.....	\$23,678,451 24
Total unfunded debt.....	3,889,501 63
Total debt liabilities.....	\$27,567,952 87
Amount of debt liabilities per mile of road 571.71 miles.....	48,220 17
Total amount of stock and debt.....	49,567,952 87
Stock and debt per mile of road 571.71 miles.....	86,701 22

# DULUTH, SOUTH SHORE & ATLANTIC RAILWAY CO. 203

## GENERAL BALANCE SHEET.—Dr.

Construction account.....		\$42,522,069 78
Equipment account.....		2,333,973 80
Other investments:		
Mackinac Transportation Co.....	\$235,278 63	
Lake Superior Terminal & Transfer R'y.....	18,100 00	
Lake Michigan & Lake Superior R'y.....	7,682 68	
Duluth Manufacturing Co.....	2,887 00	
Ropes Gold Mining Co.....	280 00	
Sault Ste. Marie Bridge Co.....	250 00	
Mineral Range R. R. Co.....	351,193 00	
Duluth & Winnipeg R. R. Co.....	2,087,479 47	
Western Express Co.....	25,000 01	
M. H. & O. lands.....	11,881 76	
Special equipment, 600 ore cars.....	343,509 66	
		3,062,944 40
Cash items:		
Cash.....	\$9,707 20	
Due from agents.....	42,831 45	
		52,538 65
Other assets:		
Materials and supplies.....	\$153,071 25	
Debit balances from companies and individuals.....	245,675 34	
		398,746 59
Profit and loss.....		1,177,639 65
Total.....		\$49,567,952 87

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....		\$22,000,000 00
Funded debt:		
D., S. S. & A. first mortg. 5% bonds.....	\$3,947,000 00	
D., S. S. & A. consols. 4% bonds.....	14,976,000 00	
M. H. & O. 8% mortg. bonds.....	1,077,000 00	
D., S. S. & A. 4% income certificates.....	3,000,000 00	
Car trust notes 2d series.....	71,394 54	
Car trust notes, 3d series.....	91,792 98	
Car trust notes, 4th series.....	279,050 53	
Car trust notes, 5th series.....	236,213 19	
		23,678,451 27
Unfunded debt:		
Interest unpaid.....	\$265,755 00	
Notes payable.....	715,500 00	
Vouchers and accounts.....	426,656 88	
		3,889,501 63
Other liabilities:		
Miscellaneous loans.....	\$2,481,589 75	
Total.....		\$49,567,952 87

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction and equipment.....	\$44,856,068 58
Average cost per mile of road (not including sidings) 571.71 miles.....	78,459 47
Proportion of cost for Michigan, 435.18 miles.....	36,497,776 24

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

### MAIN LINE.

Land and right of way and extensions and new sidings.....	\$21,069 86
Refunding bonded debt.....	86,661 50
New buildings.....	3,667 54
New fences.....	4,708 29
Machinery and tools.....	759 86
New locomotives.....	2,872 21
Total.....	\$119,739 26
Total charges to property account as above.....	119,739 26
Property sold and credited.....	1,245 00
Net addition to property account.....	118,494 26

## MICHIGAN RAILROAD RETURNS, 1896.

## ANALYSIS OF EARNINGS—IN STATE OF MICHIGAN.

PASSENGER EARNINGS.		
Main line and branches:		
Local fares .....	\$290,933 64	
Through fares .....	137,288 47	
Total passenger fares .....	\$428,222 11	
Express and baggage .....	35,137 29	
Mails .....	43,513 67	
Total passenger department earnings .....		\$506,876 07
Per train mile .....	\$0 84.26	
Per mile of road .....	1,067 04	

FREIGHT EARNINGS.		
Main line and branches:		
Local traffic .....	698,199 52	
Through traffic .....	491,949 32	
Total traffic .....	\$1,190,148 84	
Other sources, freight department .....	4,619 60	
Total freight department earnings .....		1,194,768 44
Per train mile .....	\$1 69.95	
Per mile of road .....	2,515 14	

## ANALYSIS OF EARNINGS.—ENTIRE LINES.

PASSENGER EARNINGS.		
Main line and branches:		
Local fares .....	\$312,087 92	
Through fares .....	159,703 40	
Total passenger fares .....	\$471,793 32	
Express and baggage .....	39,358 69	
Mails .....	51,871 83	
Total passenger department earnings .....		\$563,023 84
Per train mile .....	\$0 82	
Per mile of road .....	956 99	

FREIGHT EARNINGS.		
Main line and branches:		
Local traffic .....	723,313 60	
Through traffic .....	582,025 52	
Total traffic .....	\$1,305,339 12	
Other sources, freight department .....	4,619 60	
Total freight department earnings .....		1,309,958 72
Per train mile .....	\$1 61.80	
Per mile of road .....	2,226 57	

Total transportation earnings, entire line .....		\$1,872,982 56
Transportation earnings per mile of road .....	\$3,182 06	
Transportation earnings per train mile .....	1 25.18	
Miscellaneous receipts from operating account, other than for transportation, as follows:		
From car mileage balance .....	\$3,940 94	
From rents of tracks, yards and terminals .....	3,586 80	
From rents not otherwise provided for .....	25,300 23	
Total .....		32,827 97

## Distribution of miscellaneous earnings between main line and leased or proprietary roads:

	Total miscellaneous.	Proportion for Michigan.
Duluth, South Shore & Atlantic Railway .....	\$32,827 97	\$7,124 78
Total earnings from operation of road .....		\$1,905,810 53
Total earnings per mile of road .....	\$3,239 86	
Total earnings per train mile .....	1 27.87	
Proportion of taxable earnings for Michigan .....	1,708,769 29	
Total taxable earnings per mile of road in Michigan .....	3,597 18	
Income other than from earnings .....	32,402 20	
Total income from all sources .....		\$1,938,212 73
Proportion of income for Michigan .....		1,741,171 49



## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway.....	\$216,678 53
Renewals of ties.....	31,015 64
Repairs and renewals of bridges and culverts.....	41,524 13
Repairs and renewals of fences, road crossings, signs and cattle guards.....	940 75
Repairs and renewals of buildings and fixtures.....	4,850 70
Repairs and renewals of docks and wharves.....	7,470 16
Repairs and renewals of telegraph.....	2,610 47
Stationery and printing.....	125 47
Other expenses.....	10 37
<b>Total.....</b>	<b>\$305,226 22</b>

## MAINTENANCE OF EQUIPMENT.

Superintendence.....	\$8,015 97
Repairs and renewals of locomotives.....	53,834 82
Repairs and renewals of passenger cars.....	17,973 96
Repairs and renewals of freight cars.....	58,497 89
Repairs and renewals of work cars.....	4,239 92
Repairs and renewals of shop, machinery and tools.....	4,485 51
Stationery and printing.....	193 83
Other expenses.....	6,219 95
<b>Total.....</b>	<b>\$153,413 87</b>

## CONDUCTING TRANSPORTATION.

Superintendence.....	\$27,920 40
Engine and roundhouse men.....	144,253 84
Fuel for locomotives.....	159,143 78
Water supply for locomotives.....	11,862 46
Oil, tallow and waste for locomotives.....	4,061 33
Other supplies for locomotives.....	1,828 31
Train service.....	97,672 28
Train supplies and expenses.....	16,936 70
Switchmen, flagmen and watchmen.....	43,062 84
Telegraph expenses.....	31,580 48
Station service.....	83,670 12
Station supplies.....	9,559 02
Switching charges—balance.....	7,285 73
Loss and damage.....	5,887 57
Injuries to persons.....	4,374 86
Clearing wrecks.....	773 55
Operating marine equipment.....	26,924 78
Advertising.....	2,339 87
Outside agencies.....	8,246 43
Rents for tracks, yards and terminals.....	10,717 55
Rent of buildings and other property.....	5,115 00
Stationery and printing.....	10,812 14
Other expenses.....	129 62
<b>Total.....</b>	<b>\$714,218 61</b>

## GENERAL EXPENSES.

Salaries of general officers.....	\$15,375 00
Salaries of clerks and attendants.....	23,519 93
General office expenses and supplies.....	2,437 86
Insurance.....	6,922 71
Law expenses.....	5,428 17
Stationery and printing (general offices).....	2,321 40
Other expenses.....	3,815 90
Taxes.....	88,462 47
<b>Total.....</b>	<b>\$100,283 44</b>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	22.97	\$305,226 22
Maintenance of equipment.....	12.05	153,413 87
Conducting transportation.....	56.10	714,218 61
General expenses, including taxes.....	7.88	100,283 44
<b>Total operating expenses and taxes.....</b>	<b>100.00</b>	<b>\$1,273,142 14</b>
Operating expenses and taxes per mile of road.....	\$2,163 99	
Operating expenses and taxes per train mile run for trains earning revenue, 1,493,239 miles.....	85.09	
Proportion of operating expenses and taxes for Michigan, main line.....	1,106,574 90	
Total proportion of expenses for Michigan.....	\$1,106,574 90	
Percentage of expenses to earnings.....	66.80	
Net earnings per mile of road.....	1,075 36	
Net earnings per train mile.....	42.28	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Marquette to Ishpeming, 1857.  
 From Ishpeming to Champion, June, 1865.  
 From Humboldt to Republic, Sept., 1872.  
 From Champion to L'Anse, Dec., 1872.  
 From St. Ignace to Marquette, Dec., 1881.  
 From L'Anse to Houghton, July, 1883.  
 From Marquette to Winthrop Junction, June, 1884.  
 From Sault Ste. Marie to Soo Junction, Oct., 1887.  
 From Nestoria to Iron River, September, 1888.  
 From Iron River to West Superior, Dec., 1892.  
 Palmer Branch, Aug., 1888.  
 Bay Mills Branch, May, 1891.  
 Bessemer Branch, Nov., 1888.  
 Newberry Asylum Branch, June, 1894.

MAIN LINE.		Miles.	Miles.
In Michigan, from Sault Ste. Marie to Wisconsin State line.....		302.37	
In Michigan, from St. Ignace to Soo Junction.....		42.97	
In Michigan, from Nestoria to Houghton.....		48.24	
In Michigan, from Marquette to Winthrop Junction.....		17.33	
In Wisconsin, from Michigan State Line to West Superior.....			410.91
Total length completed.....			106.53
Length of double track on main line.....			517.44
			2.46

BRANCHES.			
Palmer, Negaunee to Volunteer Mine.....		6.09	
Bay Mills, Bay Mills Station to Hall & Munson Mills.....		2.25	
Republic, Humboldt to Republic.....		8.70	
Bessemer, Bessemer Junction to end of track.....		2.06	
Newberry Asylum Branch.....		2.37	
Hall, Munson & Perry Branch.....		7.22	
Prison Branch.....		.45	
Furst Stone Quarry Branch.....		.40	
Teal Lake Branch.....		1.47	
Lake Angeline Branch.....		.62	
Baron Branch.....		.39	
Martel Furnace Branch.....		.95	
Mackinaw Mill Branch.....		.70	
Lake St. Marquette Branch.....		1.28	
Polygonal Branch.....		.45	
Eagle Mill Y's Branch.....		.62	
Winthrop Branch.....		1.95	
Dexter Branch.....		2.60	
Boston Branch.....		2.06	
Champion Branch.....		.98	
Neff's Kitchi Branch.....		1.87	
Trout Creek Branch.....		.91	
McBea's Ewen Branch.....		.81	
Clark, Farnum & Co's Branch.....		.79	
Grand Rapids Mine Branch.....		1.72	
L'Anse M'dee Pier Branch.....		.81	
Baraga Mill Branch.....		.46	
Jamieson's Branch.....		2.98	
Lucy Mine Branch.....		.31	
Total.....			54.27

	Miles.	Miles.
Total length of branches owned by company.....		54.27
Total length of branches owned by company in Michigan.....	54.27	
Total length of road belonging to this company.....		571.71
Total length of road belonging to this company in Michigan.....	485.18	
Aggregate length in Michigan of sidings, spurs and other tracks not above enumerated...		109.02
Aggregate length of tracks in Michigan belonging to this company, computed as single track.....		574.20
Gauge of track, 4 feet 8½ inches.		

# DULUTH, SOUTH SHORE & ATLANTIC RAILWAY CO. 207

## *Proprietary or leased roads operated by this company.*

Name, description and length of each:	Total miles. In Michigan.	
Trackage rights:		
Dead River R. R.	2.96	2.96
Superior Terminal R'y	6.87	6.87
Northwestern Coal R'y	.38	
Chic., St. Paul, Minn. & Om. R'y	1.64	
Lake Superior Terminal & Transfer R'y	.72	
Northern Pacific R. R.	3.83	
Duluth Union Depot Co.	.20	
Total	16.62	9.85
Total miles operated by company	588.33	475.08

## *Number of bridges and trestles in Michigan.*

	Number.	Aggregate length, feet.
Wooden	* 30	2,179
Iron	8	539.5
Wooden trestles	231	39,680
Total	269	42,398.5

\* The 30 wooden spans are parts of certain trestles.

## *Draw bridges in Michigan.*

How many on your line?  
One.

Where located, when built and length of draw span:  
On Bay Mills branch, February, 1891; 32 feet.

Character of structure:  
Jack-knife draw.

Material of which constructed:  
Wood and iron.

Height above water, and depth of water under bridge:  
2 feet 4 inches in clear; depth 12½ feet.

How swung, by engine or hand power?  
Hand power.

Approaches straight or curved?  
Straight.

Do you require all trains to come to full stop before crossing a draw, and how are they signaled?  
Yes; signaled by "stop" boards, 400 feet each way from draw.

## *Crossings.—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?

Minneapolis, St. Paul & Sault Ste. Marie R'y at Trout Lake	1
Manistique R'y, west of Seney	1
Chicago & Northwestern R'y at Palmer Branch	2
"    "    "    South Jackson Mine	1
"    "    "    Negaunee Station	1
"    "    "    West Negaunee, main line	1
"    "    "    Barnum Mine	1
"    "    "    St. Lawrence Mine	1
"    "    "    Lake Angeline Mine	1
"    "    "    Winthrop Branch	3
"    "    "    Boston Branch	1
"    "    "    Republic Mine	1
"    "    "    Michigamme, main line	1
"    "    "    Michigamme, Mill tracks	2
"    "    "    Lake Superior, Section 7 Mine	1
Chicago, Milwaukee & St. Paul R'y at Champion	1
"    "    "    Republic Mine	1
"    "    "    Republic	1
"    "    "    Sidnaw	1
Nester Logging Road at Sidnaw	1

What railroads cross your road either over or under your grade in this State, and where?

Over:			
Chicago & Northwestern R'y	one mile east of Champion	.....	1
Iron Range & Huron Bay R. R.	one mile west of Champion	.....	1
Lake Superior & Ishpeming R. R.	at Bagdad Junction	.....	1
"	"	"	1
"	"	"	1
"	"	"	1
"	"	"	1
"	"	"	1
Under:			
Munising R. R.	at Munising Junction	.....	1
Chicago & Northwestern R. R.	at Negaunee	.....	2

At what crossings are interlocking and derailing switches in operation?

Chicago & Northwestern R'y	at Republic	.....	1
Chicago, Milwaukee & St. Paul R'y	at Republic	.....	1
Manistique R'y	at Seney	.....	1
Chicago & Northwestern R'y	at Michigamme	.....	1
Chicago, Milwaukee & St. Paul R'y	at Sidnaw	.....	1

What pattern or patterns have you adopted?

At Republic and Michigamme Union Switch & Signal Co.  
At Seney Gravitt Interlocking Switch Co.  
At Sidnaw Saxby & Farmer.

Number of crossings of highways at grade in this State	.....	184
Number of crossings of highways at grade in this State at which there are gates or flagmen	.....	18

Number of crossings at which there are electric or automatic signals	.....	3
----------------------------------------------------------------------	-------	---

What pattern or patterns in use?

Union Switch & Signal Co.

Number of crossings of highways over or under railroad: over, 2; under 9,	.....	11
---------------------------------------------------------------------------	-------	----

Number of highway bridges 13 feet above track	.....	2
-----------------------------------------------	-------	---

Have safety guards been erected at overhead obstructions?

Yes.

Are your frogs and guard rails blocked as required by act 174, session laws of 1883.

Yes.

How are they treated?

Filled in with wooden blocks.

#### Stations.

Number of stations on whole line	.....	52
Same in Michigan	.....	43

#### Employees.

Number of persons regularly employed on all roads operated by company, including officials	.....	1,572
Same in Michigan	.....	1,445

Classify your employees as per following list:

	Number.
Baggagemen	22
Brakemen	82
Conductors	41
Engineers	62
Firemen	68
Laborers	504
Shopmen	179
Yardmen	51
Others	568

#### REPAIRS AND RENEWALS.

##### Fencing in Michigan.

How many miles of fencing have you	.....	443.74
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Give the number of miles required to complete fence both sides of your track in Michigan, and the counties in which needed:

Mackinac	22.24
Chippewa	92.05
Luce	46.94
Schoolcraft	36.13
Alger	51.12
Marquette	92.94
Baraga	57.16
Houghton	15.55
Ontonagon	31.18
Gogebic	41.28

Total miles required	.....	486.62
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*Road bed and track.*

Number of track sections in Michigan.....		90
Average lengths of sections, miles.....	5.18	
Average number of men in each section gang.....		4
Number of new ties put in whole line during the year.....		180,208
Number of new ties put in track in Michigan.....		153,820
Average number of new ties per mile of road.....		315

*Bridges and culverts.*

Amount of trestle work replaced with earth during the year (linear feet) .....	3,586½
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	Number.
Timber culverts replaced during the year.....	6
With iron pipe,—number.....	1
With timber,—number.....	5

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender .....	85	\$469,100 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender .....	9	23,500 00
Total.....	94	\$492,600 00
Number of passenger cars—12-wheel, including official cars.....	1	\$7,000 00
Number of passenger cars—8-wheel, including official cars.....	36	144,000 00
Number of express and baggage cars.....	12	24,000 00
Number of box freight cars.....	1,143	457,200 00
Number of platform cars.....	580	174,000 00
Number of ore cars.....	1,823	502,500 00
Number of conductors' way cars.....	30	15,000 00
Other cars.....	20	42,800 00
Total.....	3,145	\$1,858,900 00
Number of locomotives equipped with power brakes .....		71
Number of passenger train cars equipped with power brakes .....		49
Number of freight cars equipped with power brakes .....		629

What patterns of power brakes have you in use, and number of locomotives and cars with each?

25 locomotives, Westinghouse.  
 28 locomotives, Westinghouse and American Steam Brake Co.  
 18 locomotives, American Steam Brake Co.  
 49 passenger cars, Westinghouse.  
 629 freight cars, Westinghouse.

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?  
 Yes.

What pattern or patterns have you adopted for use?  
 Trojan (M. C. B.)

How are your passenger cars heated?  
 Mason & Baker heaters.

## MILEAGE, TRAFFIC, ETC.

*Train mileage.*

	Entire lines. In Michigan.	
Miles run by passenger trains during the year .....	670,550	585,510
Miles run by freight trains during the year.....	761,444	654,888
Miles run by mixed trains.....	64,245	64,245
Total mileage of trains earning revenue.....	1,496,239	1,304,593

*Passenger traffic.—Entire lines.*

	Number.	Miles.	Rate.
Number of through passengers carried, earning revenue.....	47,178		
Number of local passengers carried, earning revenue.....	321,278		
Total number of passengers carried, earning revenue.....	368,451		
Number of passengers carried one mile.....	17,234,390		
Average distance carried.....		46.775	
Average amount received from each passenger.....			\$1 28.048
Average receipts per mile for through passengers.....			02.488
Average receipts per mile for local passengers.....			02.889
Average receipts per passenger per mile for all passengers.....			02.737

*Passenger traffic.—In State of Michigan.*

Number of through passengers carried, earning revenue.....	45,540		
Number of local passengers carried, earning revenue.....	303,087		
Total number of passengers carried, earning revenue.....	348,627		
Number of passengers carried one mile.....	15,250,419		
Average distance carried.....		43.744	
Average amount received from each passenger.....			\$1 22.832
Average receipts per mile for through passengers.....			02.529
Average receipts per mile for local passengers.....			02.962
Average receipts per passenger per mile for all passengers.....			02.808

*Freight traffic.—Entire lines.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	505,675		
Number of tons of local freight carried, earning revenue.....	1,837,722		
Total tons of freight carried earning revenue.....	2,338,397		
Total mileage of through freight.....	76,314,805		
Total mileage of local freight.....	35,453,347		
Total freight mileage or tons carried one mile.....	111,768,152		
Average ton haul for through freight.....		150.916	
Average ton haul for local freight.....		19.344	
Average ton haul for all freight.....		47.797	
Average amount received for each ton haul.....			\$0 55.822
Average receipts ton per mile for through freight.....			00.762
Average ton receipts per mile, for local freight.....			02.040
Average receipts ton per mile for all freight.....			01.168

*Freight traffic.—In State of Michigan.*

Number of tons of through freight carried, earning revenue.....	485,448		
Number of tons of local freight carried, earning revenue.....	1,737,047		
Total tons of freight carried, earning revenue.....	2,272,490		
Total mileage of through freight.....	64,276,708		
Total mileage of local freight.....	32,914,024		
Total freight mileage or tons carried one mile.....	97,190,732		
Average ton haul for through freight.....		132.408	
Average ton haul for local freight.....		18.417	
Average ton haul for all freight.....		42.768	
Average amount received for each ton haul.....			\$0 52.872
Average receipts ton per mile, for through freight.....			00.765
Average receipts ton per mile for local freight.....			02.121
Average receipts ton per mile, for all freight.....			01.224

## FREIGHT TRAFFIC MOVEMENT.—ENTIRE LINES.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain .....	3,120	29,675	32,795	1.40
Flour .....	31,158	18,566	49,724	2.13
Other mill products .....	3,577	6,200	9,777	.42
Hay .....	2,282	21,170	23,452	1.00
Fruit and vegetables .....	474	10,009	10,483	.45
<b>Products of animals:</b>				
Live stock .....	559	1,904	2,357	.10
Dressed meats .....	85	10,189	10,274	.44
Other packing house products .....	21	48	69	—
Poultry, game and fish .....	535	108	640	.08
Wool .....	—	1,936	1,936	.08
Hides and leather .....	53	56	109	—
<b>Products of mines:</b>				
Anthracite coal .....	7,553	123	7,676	.33
Bituminous coal .....	60,252	46	60,298	2.58
Coke .....	—	206	206	.01
Ores .....	1,846,355	—	1,846,355	57.58
Stone, sand, and other like articles .....	4,579	680	5,259	.23
<b>Products of forest:</b>				
Lumber .....	144,919	19,808	164,722	7.04
Logs .....	357,963	1,951	359,904	15.39
<b>Manufactures:</b>				
Petroleum and other oils .....	1,131	3,756	4,887	.21
Sugar .....	30	1,490	1,520	.07
Iron, pig and bloom .....	10,570	1,345	11,915	.51
Iron and steel rails .....	1,856	4,037	5,893	.25
Other castings and machinery .....	3,305	7,207	10,512	.45
Bar and sheet metal .....	164	6,919	7,083	.30
Cement, brick and lime .....	1,062	3,532	4,594	.20
Agricultural implements .....	—	243	243	.01
Wagons, carriages, tools, etc. ....	413	546	959	.04
Wines, liquors and beers .....	875	2,977	3,852	.16
Household goods and furniture .....	566	453	1,019	.04
<b>Merchandise .....</b>	<b>22,050</b>	<b>45,936</b>	<b>67,985</b>	<b>2.91</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above. ....	84,095	47,714	131,809	5.64
<b>Total tonnage .....</b>	<b>2,069,626</b>	<b>248,771</b>	<b>2,338,397</b>	<b>100.00</b>

## FREIGHT TRAFFIC MOVEMENT.—IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight origin- ating on this road outside of Michigan, and all freight received from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	116	31,613	31,729	1.40
Flour.....	101	48,960	49,061	2.16
Other mill products.....	31	9,319	9,350	.41
Hay.....	1,774	20,868	22,332	.98
Fruit and vegetables.....	408	10,010	10,413	.46
<b>Products of animals:</b>				
Live stock.....	449	1,887	2,286	.10
Dressed meats.....	85	10,189	10,274	.45
Other packing house products.....	21	48	69	—
Poultry, game and fish.....	536	103	640	.08
Wool.....	—	1,882	1,882	.08
Hides and leather.....	53	56	109	.01
<b>Products of mines:</b>				
Anthracite coal.....	7,451	184	7,595	.33
Bituminous coal.....	60,238	60	60,298	2.65
Coke.....	—	206	206	.01
Ores.....	1,346,355	—	1,346,355	59.25
Stone, sand, and other like articles.....	4,325	806	5,133	.23
<b>Product of forest:</b>				
Lumber.....	118,749	25,381	144,080	6.34
Logs.....	838,505	1,951	838,456	14.76
<b>Manufactures:</b>				
Petroleum and other oils.....	1,021	3,779	4,800	.21
Sugar.....	29	1,491	1,520	.07
Iron, pig and bloom.....	10,570	1,345	11,915	.52
Iron and steel rails.....	1,856	4,020	5,876	.26
Other castings and machinery.....	3,063	7,004	10,067	.44
Bar and sheet metal.....	164	6,562	6,726	.30
Cement, brick and lime.....	701	3,616	4,317	.19
Agricultural implements.....	—	243	243	.01
Wagons, carriages, tools, etc.....	413	546	959	.04
Wines, liquors and beers.....	875	2,955	3,830	.17
Household goods and furniture.....	417	552	969	.04
<b>Merchandise.....</b>	<b>19,786</b>	<b>45,769</b>	<b>65,555</b>	<b>2.89</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	71,205	47,220	118,425	5.21
<b>Total tonnage.....</b>	<b>1,984,021</b>	<b>288,469</b>	<b>2,272,490</b>	<b>100.00</b>



## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

Western Express Company does a general business. We receive variable amounts per month based upon the earnings of the Western Express Co. We take their freight at our depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

234.00 miles of line and 448.04 miles of wire belongs to D., S. S. & A. R'y Co.

294.70 miles of line and 843.80 miles of wire belongs to Western Union Telegraph Co.

## TRANSPORTATION COMPANIES.

*Sleeping, drawing-room and palace car companies.*

What sleeping, drawing-room, chair or other palace passenger cars, not the exclusive property of your own or some other railroad company, have, during the year, been in use on your road in the State of Michigan, and on what terms? If rented by you, or allowed mileage between local points in this State, what was the amount paid for the use of such cars during the period under report?

Name of company.	General office.	Amount paid.
Wagner Palace Car Co.....	New York, N. Y.....	\$9,125 18

*Fast freight lines.*

To what fast freight lines or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

Name of company.	General office.	Amount paid.
Merchants' Despatch Transportation Co.	New York, N. Y.	\$149 78
Blue Line	Rochester, N. Y.	232 11
Canada Southern Line	Rochester, N. Y.	36 22
Sun Oil Line	Toledo, Ohio	10 64
Armes Palace Horse and Stock Car Co.	Chicago, Ill.	12 01
Union Tank Line	New York, N. Y.	37 34
National Despatch Line	St. Albans, Vt.	3 02
Red Line Transit Co.	Buffalo, N. Y.	20 30
Chicago Refrigerator Car Co.	Chicago, Ill.	5 41
American Tank Line	Cleveland, O.	10 51
Armour Car Lines	Chicago, Ill.	362 06
Morris & Co. Refrigerator Line	Chicago, Ill.	132 02
Street's Stable Car Line	Chicago, Ill.	1 06
Union Refrigerator Transportation Co.	St. Louis, Mo.	177 69
Canadian Pacific Despatch	Boston, Mass.	1,471 28
Cudahy Refrigerator Line	South Omaha, Neb.	18
Swift Refrigerator Line	Chicago, Ill.	435 87
Hammond Refrigerator Line	Hammond, Ind.	541 69
American Refrigerator Transit Co.	St. Louis, Mo.	11 63
Empire Line	Philadelphia, Pa.	8 51
Paragon Refining Co.	Toledo, Ohio	21 36
Armour Packing Co.	Kansas City, Mo.	109 27
International Fruit Dealers' Despatch	Chicago, Ill.	7 36
St. Louis Refrigerator Car Line	St. Louis, Mo.	6 86
Cudahy Milwaukee Refrigerator Line	Milwaukee, Wis.	84
Dold Packing Co.	Kansas City, Mo.	1 23
Provision Dealers' Despatch	Chicago, Ill.	6 60
California Fruit Transportation Co.	Chicago, Ill.	4 32
Craig Oil Line	Toledo, Ohio	9 31
Burton Stock Car Co.	Boston, Mass.	15 78
Commerce Dispatch	Indianapolis, Ind.	48
Keystone Palace Horse Car Co.	Chicago, Ill.	1 97
Anglo American Refrigerator Co.	Chicago, Ill.	13 23
Railway Car Association	Lafayette, Ind.	1 41
Peerless Tank Line	Cleveland, O.	63 32
Continental Fruit Express	Chicago, Ill.	11 84
White Line	Buffalo, N. Y.	2 19
Green Line	Philadelphia, Pa.	72
Goodell Refrigerator Line	Chicago, Ill.	92
Peavy Grain Line	Minneapolis, Minn.	3 30
Manhattan Oil Co.	Lima, Ohio	1 88
Globe Tank Line	Marietta, Ohio	40
New York Despatch Refrigerator Line	Eldon, Ill.	1 73
Penn Refining Co.	Cleveland, Ohio	40
St. Paul Refrigerator Line	St. Paul, Minn.	20 43
Rock Falls M'fg Co.	Chicago, Ill.	61
Bay Terminal Co.	Toledo, Ohio	24 42
Southern Freight Line	Atlanta, Ga.	16
American Cereal Co.	Chicago, Ill.	2 00
Erie Despatch	Cleveland, Ohio	1 06
Cottolene Refrigerator Line	Chicago, Ill.	77

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

## KILLED.

February 19, Frank Smith, coal heaver, Marquette. Piece of coal weighing 700 or 800 pounds fell on him; accidental.  
 February 19, Jerry Donahue, brakeman, Chassell. Rear end collision; lack of caution.  
 April 11, Geo. Adams, trespasser, Driggs. Trespasser; lack of caution.  
 May 1, A. Caron, laborer, Danaher. Jerked off of car under train; lack of caution.  
 June 10, Ed. Downey, brakeman, Negaunee. Jerked off of car under train; accidental.  
 July 28, A. Daglio, trespasser, Negaunee. Trespasser; lack of caution.  
 Aug. 23, John Norbom, trespasser, Marquette. Trespasser; lack of caution.  
 Aug. 31, Andrew Brandt, laborer, Trout Creek. Gravel plow tipped off car and fell on his head; accidental.

## INJURED.

January 10, P. Lafraniere, car repairer, St. Ignace. Fell through coal hatch on transfer boat while inspecting cars; carelessness.  
 January 24, B. Messier, switchman, Marquette. Knocked off side of car by a pile of lumber; lack of caution.  
 January 22, John Osborn, transfer man, Houghton. Grindstone fell on his leg; accidental.  
 January 18, C. McLean, brakeman, Beaufort Junction. Jumped from top of train to avoid further injury in collision; accidental.  
 February 1, B. Haake, trespasser, Matchwood. Trespasser; fell off train; lack of caution.  
 February 9, Thos. Carney, brakeman, Provost. Coupling; lack of caution.  
 February 13, O. Azotte, switchman, Marquette. Fell from train; accidental.  
 February 19, H. Fee, conductor, Chassell. Rear end collision; lack of caution.  
 March 13, J. McLean, carpenter, St. Ignace. Cut his foot with an adz; accidental.  
 March 20, Geo. Elskey, laborer, Marquette. Putting pilot on an engine; slipped and caught his hand; accidental.  
 April 20, A. Tousignant, brakeman, Nestoria. Coupling; lack of caution.  
 March 3, John Barnaby, brakeman, L'Anse. Coupling; lack of caution.  
 May 12, Geo. Mailhot, section foreman, St. Ignace. Rail fell on his hand; accidental.  
 May 14, W. M. Johnson, trespasser, Newberry. Trespasser; caught foot between draw heads; lack of caution.  
 May 26, Martin Kork, laborer, Marquette; Fell from car into dock pocket; accidental.  
 March 30, P. Lavalle, brakeman, Thomaston. Coupling lack of caution.  
 June 17, M. Schultz, laborer, Marquette. Struck on arm with ore dock scout crank; accidental.  
 June 18, M. Flannery, switchman, Negaunee. Coupling; lack of caution.  
 July 6, A. McClure, brakeman, Eagle Mills. Rear end collision; accidental.  
 July 13, L. Jones, laborer, Sault Ste. Marie. Trying to get on moving push car, his foot slipped and car passed over his leg; accidental.  
 July 23, M. Wallace, brakeman, Champion. Coupling; accidental.  
 August 23, D. McAuliff, trespasser, Negaunee. Trying to jump on moving train and fell under train; accidental.  
 August 31, E. Laframer, conductor, Kenton. Truck fell on his foot; accidental.  
 September 21, O. Ostermeyer, brakeman, Champion. Fell off car of logs; accidental.  
 December 9, O. Dolf, laborer, Marquette. Piece of iron fell on his foot; accidental.  
 December 23, A. Tousignant, brakeman, Trout Creek. Coupling; lack of caution.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....	-----	1	-----	-----	3	-----
Coupling cars.....	-----	-----	-----	-----	7	-----
Falling from trains.....	-----	-----	-----	-----	3	-----
Miscellaneous.....	-----	4	-----	-----	10	-----
Trespassers on trains.....	-----	-----	2	-----	-----	3
Trespassers on tracks.....	-----	-----	1	-----	-----	-----
Total.....	-----	5	3	-----	23	3

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year.....	8
Number of persons injured during the year.....	26
Number of casualties purely accidental.....	18
Number resulting from lack of caution, carelessness or misconduct.....	16
Persons killed or injured while intoxicated.....	2
Trespassers and tramps killed or injured.....	6

## MICHIGAN RAILROAD RETURNS, 1896.

## CLASSIFICATION OF EMPLOYÉS.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Brakemen .....	2	9	11
Conductors .....	2	2	2
Laborers .....	2	5	7
Yardmen .....	3	3	3
Not classified above .....	1	4	5
Total .....	5	28	28

STATE OF MICHIGAN, }  
COUNTY OF MARQUETTE, } ss.

A. E. Delf, Auditor, of the Duluth, South Shore and Atlantic Railway Company, being duly sworn deposes and says that he have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of his knowledge and belief.

[L. S. OF A. E.]

Signed,

A. E. DELF, Auditor.

Subscribed and sworn to before me this 1st day of April, A. D. 1897.

[L. S.]

CHARLES A. PAYNE.

ANNUAL REPORT  
OF THE  
FLINT & PERE MARQUETTE RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed April 28, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, W. W. CRAPO, New Bedford, Mass.  
*Secretary and Treasurer*, H. C. POTTER, JR., Saginaw, E. S., Mich.  
*Auditor*, C. S. McMILLAN, Saginaw, E. S., Mich.  
*General Manager*, S. T. CRAPO, Saginaw, E. S., Mich.  
*General Superintendent*, W. F. POTTER, Saginaw, E. S., Mich.  
*Traffic Manager*, A. PATRIARCHE, Saginaw, E. S., Mich.  
*Chief Engineer*, W. B. SEARS, Saginaw, E. S., Mich.  
*Superintendent of Telegraph*, A. H. FOLLETT, Saginaw, E. S., Mich.  
*Cashier*, T. E. BORDEN, Saginaw, E. S., Mich.  
*Attorneys*, HANCHETT & HANCHETT, Saginaw, E. S., Mich.

DIRECTORS.

WILLIAM W. CRAPO, New Bedford, Mass.  
LOUW SNOW, New Bedford, Mass.  
GEORGE COPPELL, New York City.  
THOMAS F. RYAN, New York City.  
J. LEWIS STACKPOLE, Boston, Mass.  
R. B. DODSON, New York City.  
LEWIS PIERCE, Portland, Maine.  
HENRY B. STONE, Chicago, Ill.  
H. C. POTTER, Saginaw, E. S., Mich.  
H. C. POTTER, JR., Saginaw, E. S., Mich.  
W. H. TOUSEY (deceased), Bay City, Mich.  
Terms expire third Wednesday in May.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: August 31, 1880.  
Number of stockholders at date of last election: 1,566.  
Number of stockholders in Michigan at same date: 14.  
Amount of full paid stock held in Michigan at same date: \$58,200.00.  
Date of annual meeting of stockholders: Third Wednesday in May.  
Fiscal year of company ends December 31st.  
General offices of the company are located at Saginaw, E. S., Mich.

**GENERAL EXHIBIT.**

	Debit.	Credit.
Total earnings from operation.....		\$2,118,798 12
Total expenses, including taxes.....	\$1,589,198 11	
Net income.....		\$529,600 01
Interest on funded debt.....	\$591,106 66	
Interest on unfunded debt.....	22,216 64	
	\$613,323 30	
Steamer earnings.....		127,373 13
Miscellaneous earnings.....		1,186 46
Balance applicable to dividends.....		\$44,839 30
Balance for the year.....		\$44,839 30
Balance (profit and loss) last year.....		153,815 91
Balance forward to next year.....		\$198,155 21

### ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$10,000,000 00
Par value of shares.....	\$100 00	
Number of shares issued.....	96,402	
Amount paid in on common.....		\$3,298,200 00
Amount paid in on preferred.....		6,342,000 00
Amount of shares not issued, number... { Preferred .....1,590 } Common .....2,018 }		359,800 00
Total amount as per books of the company.....		10,000,000 00
Per mile of road owned by company, 738.93 miles.....		13,538 08

### ANALYSIS OF DEBT ACCOUNTS.

**FUNDED DEBT.**

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
Holly, Wayne & Monroe .....	8%	Jan. 1, 1901.....	New York City....	\$1,000,000 00
F. & P. M. 6's .....	6%	Oct. 1, 1920.....	New York City....	3,999,000 00
F. & P. M. 5's .....	5%	May 1, 1939.....	New York City....	2,100,000 00
P. H. & N. W. Div. 5's .....	5%	April 1, 1939.....	New York City....	3,250,000 00
Equipment 5's .....	5%	\$40,000 annual'y	Boston.....	40,000 00
Total funded debt .....				\$10,389,000 00

**UNFUNDED DEBT.**

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For miscellaneous.....	.....	\$1,589,482 48

### RECAPITULATION.

Total funded debt.....	\$10,389,000 00
Total unfunded debt.....	1,589,482 48
Total debt liabilities.....	\$11,978,482 48
Amount of debt liabilities per mile of road, 738.93 miles.....	16,210 57
Total amount of stock and debt.....	21,978,482 48
Stock and debt per mile of road, 738.93 miles.....	29,743 66

## GENERAL BALANCE SHEET.—Dr.

Construction account.....		}	\$21,405,784 05
Equipment account.....			
Other investments:			
F. & P. M. steamers, 4.....	\$386,320 29		
Car ferry, Pere Marquette.....	286,178 72		
Bay City Belt Line R. R. stock and advances.....	114,840 28		
Fort Street Union Depot Stock.....	250,000 00		
Elevators.....	3,604 17		
			1,020,943 46
Cash items:			
Cash.....	\$94,707 83		
Bills receivable.....	10,000 00		
Due from agents.....	111,161 85		
			215,868 68
Other assets:			
Materials and supplies.....	\$74,674 88		
Debit balances from companies and individuals.....	454,381 72		
F. & P. M. stock unsold (preferred).....	158,000 00		
F. & P. M. common stock unsold.....	201,800 00		
			888,856 60
Total.....			\$23,531,452 79

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....		\$10,000,00 00
Funded debt.....		10,389,000 00
Unfunded debt:		
Interest unpaid, not due.....	\$118,443 30	
Notes payable.....	824,964 78	
Vouchers and accounts.....	842,591 39	
Other liabilities:		
State tax payable July, 1897.....	45,103 52	
Monroe & Toledo R. R. bills payable.....	128,362 76	
Pere Marquette Trans. Co. bills payable.....	86,500 00	
Property renewals.....	43,516 78	
		1,589,482 48
Profit and loss or income accounts.....		1,532,970 31
Total.....		\$23,531,452 79

## COST OF ROAD AND EQUIPMENT.

Total cost for construction of road and branches built by company.

Total expended for construction and equipment.....	\$21,405,784 05
Average cost per mile of road (not including sidings), 783.93 miles.....	28,978 82
Proportion of cost for Michigan.....	21,405,784 05

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Roadway and structures.....	\$19,240 94
Land.....	7,648 14
Total charges.....	\$26,889 08
Total charges to property account as above.....	26,889 08
Net addition to property account.....	26,889 08

## ANALYSIS OF EARNINGS.—IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

Main line and branches:	
Local fares.....	\$541,517 06
Through fares.....	51,732 01
Total passenger fares.....	\$593,249 07
Express and baggage.....	51,639 82
Mails.....	66,926 15
Other sources.....	18,138 43
Total passenger department earnings.....	\$729,973 47
Per train mile.....	\$0 69
Per mile of road.....	957 54

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic .....	\$968,400 43	
Through traffic .....	418,452 80	
Total traffic .....		\$1,386,852 93
Total freight department earnings .....		\$1,386,852 93
Per train mile .....	\$1 18	
Per mile of road .....	1,819 42	

## ANALYSIS OF EARNINGS.—ENTIRE LINES.

## PASSENGER EARNINGS.

Main line and branches:		
Local fares .....	\$542,056 83	
Through fares .....	51,803 67	
Total passenger fares .....		\$593,860 00
Express and baggage .....	\$51,639 82	
Mails .....	68,926 15	
Other sources .....	18,134 43	
Total passenger department earnings .....		\$780,564 40
Per train mile .....	\$0 69	
Per mile of road .....	958 85	

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic .....	\$989,364 60	
Through traffic .....	418,869 12	
Total traffic .....		1,388,233 72
Total freight department earnings .....		\$1,388,233 72
Per train mile .....	\$1 19	
Per mile of road .....	1,819 55	
Total transportation earnings, entire line .....		\$2,118,798 12
Transportation earnings per mile of road, 762.96 miles .....	2,777 07	
Transportation earnings per train mile, 2,231.282 miles .....	95	
Total earnings from operation of road .....		\$2,118,798 12
Total earnings per mile of road, 762.96 miles .....	\$2,777 07	
Total earnings per train mile, 2,231.282 miles .....	95	
Proportion of taxable earnings for Michigan, 762.25 miles .....	2,116,826 40	
Total taxable earnings per mile of road in Michigan, 762.25 miles .....	2,777 06	
Net steamer earnings .....		127,873 18
Rents of tenements .....		1,186 46
Total income from all sources .....		\$2,247,357 71
Proportion of income for Michigan, .....		2,245,385 99

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway .....	\$196,843 17
Renewals of rails .....	600 00
Renewals of ties .....	71,284 29
Repairs and renewals of bridges and culverts .....	12,292 12
Repairs and renewals of fences, road crossings, signs and cattle guards .....	14,133 82
Repairs and renewals of buildings and fixtures .....	29,507 76
Repairs and renewals of docks and wharves .....	985 53
Repairs and renewals of telegraph .....	2,093 59
Stationery and printing .....	202 76
Total .....	\$327,893 03



## MAINTENANCE OF EQUIPMENT.

Superintendence.....	\$7,655 40
Repairs and renewals of locomotives.....	90,750 43
Repairs and renewals of passenger cars.....	44,820 04
Repairs and renewals of freight cars.....	76,321 43
Repairs and renewals of work cars.....	2,787 12
Repairs and renewals of shop machinery and tools.....	628 79
Stationery and printing.....	368 99
Other expenses.....	1,476 84
<b>Total.....</b>	<b>\$214,809 04</b>

## CONDUCTING TRANSPORTATION.

Superintendence.....	\$18,300 94
Engine and roundhouse men.....	160,114 08
Fuel for locomotives.....	158,053 10
Water supply for locomotives.....	12,298 40
Oil, tallow and waste for locomotives.....	4,572 10
Other supplies for locomotives.....	1,705 08
Train service.....	139,817 68
Train supplies and expenses.....	23,939 72
Switchmen, flagmen and watchmen.....	66,884 06
Telegraph expenses.....	18,873 84
Station service.....	177,173 28
Station supplies.....	14,566 18
Switching charges—balance.....	328 81
Car mileage—balance—Cr.....	4,924 81
Loss and damage.....	7,904 70
Injuries to persons.....	5,861 47
Clearing wrecks.....	1,232 93
Advertising.....	6,933 10
Outside agencies.....	23, 29 41
Rents for tracks, yards and terminals.....	66,174 00
Rent of buildings and other property.....	264 24
Stationery and printing.....	11,740 61
Other expenses.....	1,517 32
<b>Total.....</b>	<b>\$921,499 71</b>

## GENERAL EXPENSES.

Salaries of general officers.....	\$21,349 92
Salaries of clerks and attendants.....	29,471 32
General office expenses and supplies.....	5,197 40
Insurance.....	7,021 68
Law expenses.....	3,475 83
Stationery and printing (general offices).....	1,777 31
Other expenses.....	8,054 13
Taxes.....	43,643 79
<b>Total.....</b>	<b>\$124,996 33</b>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	20.63	\$327,893 03
Maintenance of equipment.....	13.52	214,809 04
Conducting transportation.....	57.96	921,499 71
General expenses, including taxes.....	7.87	124,996 33
<b>Total operating expenses and taxes.....</b>	<b>100.00</b>	<b>\$1,589,198 11</b>
Operating expenses and taxes per mile of road, 762.96 miles.....	\$2,082 93	
Operating expenses and taxes per train mile run, for trains, earning revenue, 2,231,282 miles.....	.71	
Total proportion of expenses for Michigan.....		1,587,719 23
Percentage of expenses to earnings.....	75.00	
Net earnings per mile of road, 762.96 miles.....		694 14
Net earnings per train mile, 2,231,282 miles.....		24

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Monroe to Ludington, December 1, 1874.  
 From Manistee Junction to Manistee, June 2, 1882.  
 From City of Saginaw to City of Saginaw, Belt Line, June 16, 1889.  
 From Port Huron to Sand Beach, Sept. 13, 1890.  
 From Port Huron to Saginaw, February 22, 1892.  
 From Port Huron to Almont, Oct. 3, 1892.  
 From Palms Junction to Port Austin, December 11, 1892.  
 From Port Austin to Grindstone City, July 31, 1892.

MAIN LINE.		Miles.	Miles.
In Michigan, from Monroe or Raisin to Ludington .....		249.34	
Total length completed .....			249.34
BRANCHES.			
Monroe branch .....		2.97	
Detroit Division .....		8.67	
Flint River Division .....		19.51	
Bay City Division and branches .....		16.28	
Bay City Loop Line .....		3.02	
Crow Island Branch .....		1.57	
St. Clair Division .....		16.75	
Saginaw Belt .....		9.84	
Zilwaukee Branch .....		6.33	
West Shore Branch .....		3.89	
Coleman Branch .....		22.32	
Mt. Pleasant Division .....		14.78	
Hoyt North and South Branch .....		18.33	
Harrison Division .....		35.74	
Star Lake Branch .....		23.55	
Manistee Division and Branches .....		29.73	
Eastern Division .....		90.30	
Sand Beach Division, 3 ft. gauge .....		70.18	
Port Austin Division, 3 ft. gauge .....		39.98	
Almont Division .....		33.91	
Business Producing Spurs .....		18.44	
Total length of branches owned by company .....			486.09
Total length of branches owned by company in Michigan .....		486.09	
Total length of road belonging to this company .....			735.43
Total length of road belonging to this company in Michigan .....		735.43	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated .....			177.81
Aggregate length of tracks in Michigan belonging to this company, computed as single track .....			913.24
Gauge of track, 4 feet 8½ inches, 736.20 miles.			
Gauge of track, 3 feet, 157.04 miles.			

*Proprietary or leased roads operated by this company.*

Name, description, and length of each:	Total miles. In Michigan.	
Detroit Terminal, Delray to 18th Street .....	3.24	3.24
Detroit Terminal, 18th Street to Fort Street .....	1.36	1.36
Detroit G. R. & Western, Plymouth to Redford .....	11.63	11.63
Bay City Belt Line .....	8.09	8.09
Bridge Junction to West Bay City, D. & M. R'y .....	26	26
Monroe & Toledo, Raisin to Alexis .....	18.72	18.00
Ann Arbor R. R. Alexis to Toledo .....	4.93	
Total .....	48.23	42.58
Total miles operated by the company .....	783.66	778.01

*Number of bridges and trestles in Michigan.*

	Number.	Aggregate length feet.
Wooden bridges .....	10	623½
Iron .....	29	3,725½
Combination .....	9	939
Wooden trestles .....		15,590½
Total .....	48	20,881½

*Draw bridges in Michigan.*

How many on your line .....	4
Where located, when built, and length of draw span:	Feet.
One at Saginaw, built in 1893, iron .....	168
One at Saginaw, built in 1893, iron .....	142
One at South Saginaw, built in 1899, iron .....	129
One at Port Huron, built in 1892, iron .....	170½

Character of structure:

Pratt truss.

Material of which constructed:

Iron and steel.

Height above water, and depth of water under bridge:  
12 to 16 feet.

How swung, by engine or hand power?  
Hand power.

Approaches straight or curved?  
Two straight, two curved.

Do you require all trains to come to full stop before crossing a draw, and how are they signaled?  
Yes, until signaled by hand.

*Crossings.—Railroad and highway.*

What railroads cross your road at grade in this State and at what locality?

Lake Shore & Michigan Southern R. R. at Carlton, Delray and Monroe.  
Wabash R. R. at Romulus and Delray.  
Michigan Central R. R. at Saginaw Junction, Vassar, Otter Lake, Saginaw, W. S., Mershon, Bay City 3 times, Delray twice.  
Detroit, Grand Rapids & Western R. R. at Plymouth.  
Chicago & Grand Trunk R. R. at Flint, G. T. Junction, Port Huron.  
Detroit, Grand Haven & Milwaukee R. R. at Holly.  
Cincinnati, Saginaw & Mackinac R. R. at Saginaw, Mershon.  
Ann Arbor R. R. at Clare.  
Grand Rapids & Indiana R. R. at Reed City.  
Manistee & Luther R. R. at East Lake.  
Chicago & West Michigan R. R. at Baldwin.  
Manistee & North Eastern R. R. at Manistee.  
Pontiac, Oxford & Northern R. R. at Clifford.  
Midland & Northern R. R. at Midland.  
Grand Trunk R. R. at Wixom, G. T. Junction, Port Huron twice.

What railroads cross your road either over or under your grade in this State, and where?

Over:  
Manistee & Grand Rapids R. R. at Stronach.  
Under:  
Michigan Central R. R. at Springwells and Detroit.

At what crossings are interlocking and derailing switches in operation?

Michigan Central—Mershon, Wayne, Delray, Saginaw 3 places, Bay City 3 places.  
Cincinnati, Saginaw & Mackinaw—Saginaw 3 places, Mershon.  
Ann Arbor—Clare.  
Chicago & West Michigan—Baldwin.  
Chicago & Grand Trunk and Grand Trunk—Grand Trunk Junction, Port Huron.  
Wabash and Lake Shore & Michigan Southern—Delray.  
Wabash—Romulus.  
Midland & Northern—Midland.  
Manistee & Luther—East Lake.  
Manistee & North Eastern—Manistee.  
Lake Shore & Michigan Southern—Monroe.

Number of crossings of highways at grade in this State.....	842
Number of crossings of highways at grade in this State at which there are gates or flagmen.....	36
Number of crossings at which there are electric or automatic signals.....	4

What pattern or patterns in use?  
O'Neil's electric.

Number of crossings of highways over or under railroad: over, 3; under, 9.....	12
Number of highway bridges, 16 feet above track.....	3

Have safety guards been erected at overhead obstructions?

Yes.  
Are your frogs and guard rails blocked as required by act 174, Session Laws of 1883?

Yes.  
How are they treated?  
Block, and the Hart guards.

*Stations.*

Number of stations on whole lines.....	139
Same in Michigan.....	138

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials.....	2,077
Same in Michigan.....	2,065

Classify your employes as per following list:

	Number.
Baggagemen.....	22
Brakemen.....	121
Conductors.....	65
Engineers.....	82
Firemen.....	97
Laborers.....	836
Shopmen.....	211
Yardmen.....	78
Others.....	555

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? ..... 724½

Give the number of miles required to complete fence both sides of your track in Michigan, and the counties in which needed:

Midland .....	3
Isabella .....	1½
Clare .....	7½
Gladwin .....	5½
Lake .....	11
Mason .....	14
Manistee .....	7
Huron .....	4
Sanilac .....	2½
Total miles required .....	56½

*Road bed and track.*

Number of track sections in Michigan .....	117
Average lengths of sections, miles .....	7.87
Average number of men in each section gang .....	4
Number of new ties put in whole line during the year .....	397,567
Number of new ties put in track in Michigan .....	397,567
Average number of new ties per mile of road .....	424 7-10

*Bridges and culverts.*

Timber culverts replaced during the year:	Number.
With iron pipe .....	24
With sewer pipe .....	42

New bridges built during the year—number.

Location.	Kind.	Material.	Month built.	Feet in length.
Sand Creek .....	Pile trestle .....	Wood .....	June to Aug .....	42
Raisin River .....	" .....	" .....	" .....	125
Raisin River .....	Steel 2 spans .....	Steel .....	September .....	330
French Creek .....	Pile trestle .....	Wood .....	June to Aug .....	42
Plum Creek .....	Deck girder .....	Steel .....	September .....	44
La Plaisance Creek .....	Bents on concrete .....	Wood .....	June to Aug .....	42
Woodchuck Creek .....	" .....	" .....	" .....	36
Otter Creek .....	" .....	" .....	" .....	60
Otter Creek .....	Deck girder .....	Steel .....	September .....	70
Sulphur Creek .....	Pile trestle .....	Wood .....	June to Aug .....	42.6
Brook Creek .....	" .....	" .....	" .....	42
Kenney's Creek .....	" .....	" .....	" .....	56
Bay Creek .....	" .....	" .....	" .....	41
Indian Creek .....	" .....	" .....	" .....	58
Indian Creek .....	Deck girder .....	Steel .....	" .....	30
Muddy Creek .....	Bents on concrete .....	Wood .....	June to Aug .....	42

ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender .....	91	\$574,500 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender .....	10	45,000 00
Number of locomotives of 10 to 20 tons weight, exclusive of tender .....	2	5,000 00
Total .....	103	\$624,500 00
Number of passenger cars—12-wheel, including official cars .....	4	\$28,050 00
Number of passenger cars—8-wheel, including official cars .....	89	157,250 00
Number of express and baggage cars .....	24	13,950 00
Number of box freight cars .....	1,729	\$45,800 00
Number of stock cars .....	44	7,920 00
Number of platform cars "flats" .....	1,153	172,950 00
Number of conductors' way cars .....	46	9,200 00
Other cars as follows:		
Charcoal .....	52	
Coal .....	233	
Furniture .....	70	
Refrigerator .....	13	
Boarding .....	6	
Log .....	74	
Snowplow .....	6	
Tool cars .....	8	
Painters .....	2	
Excavators .....	2	
Pile driver .....	1	
Cellar .....	2	
Derrick .....	1	
Scale testing .....	1	
Telegraph .....	1	
Water supply .....	1	
Bridge material .....	3	
Total .....	476	117,000 00
Total .....	3,565	\$837,120 00
Number of locomotives equipped with power brakes .....		63
Number of passenger-train cars equipped with power brakes .....		117
Number of freight cars equipped with power brakes .....		6

What patterns of power brakes have you in use, and number of locomotives and cars with each?

Westinghouse air brakes, 182.  
40 engines equipped with steam driver and tender brake.  
63 engines equipped with Westinghouse air brakes.

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 85, session laws of 1887?  
Yes.

What pattern or patterns have you adopted for use?  
Gould.

How are your passenger cars heated?  
Baker & Smith hot water.

MILEAGE TRAFFIC, ETC.

	Train mileage.	All in Michigan.
Miles run by passenger trains during the year .....		1,020,704
Miles run by freight trains during the year .....		1,122,794
Miles run by mixed trains .....		87,784
Total mileage of trains earning revenue .....		2,231,282

Passenger traffic.—Road all in State of Michigan.

	Number.	Miles.	Rate.
Number of through passengers carried, earning revenue .....	28,404		
Number of local passengers carried, earning revenue .....	948,904		
Total number of passengers carried, earning revenue .....	977,308		
Number of passengers carried one mile .....	28,086,430		
Average distance carried .....		28.7396	
Average amount received from each passenger .....			\$0 60.7054
Average receipts per mile for through passengers .....			01.952
Average receipts per mile for local passengers .....			02.128
Average receipts per passenger per mile for all passengers .....			02.112

*Freight traffic.—Road all in State of Michigan.*

Number of tons of through freight carried, earning revenue.....	575,748	
Number of tons of local freight carried, earning revenue.....	1,080,180	
Total tons of freight carried, earning revenue.....	1,605,878	
Total mileage of through freight.....	109,119,561	
Total mileage of local freight.....	79,885,831	
Total freight mileage or tons carried one mile.....	188,005,392	
Average ton haul for through freight.....	187.7897	
Average ton haul for local freight.....	77.5492	
Average ton haul for all freight.....	117.0732	
Average amount received for each ton haul.....		\$0 86.354
Average receipts ton per mile, for through freight.....		00.396
Average receipts ton per mile, for local freight.....		01.210
Average receipts ton per mile, for all freight.....		00.787

## FREIGHT TRAFFIC MOVEMENT.—ROAD ALL IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	61,597	93,920	155,517	9.69
Flour.....	11,886	157,100	168,986	10.50
Other mill products.....	6,325	45,338	51,663	3.22
Hay.....	57,014	12,489	69,503	4.32
Fruit and vegetables.....	6,504	5,372	11,876	.74
Potatoes.....	36,589	1,899	38,488	2.40
<b>Products of animals:</b>				
Live stock.....	18,641	3,376	22,017	1.37
Dressed meats.....	1,099	1,370	2,469	.16
Poultry, game and fish.....	1,067	574	1,641	.10
Wool.....	571	49	620	.04
Hides and leather.....	1,653	2,648	4,301	.27
<b>Products of mines:</b>				
Anthracite coal.....	5,688	53,047	58,730	3.66
Bituminous coal.....				
Stone, sand and other like articles.....	42,075	3,911	45,986	2.87
Salt.....	70,625	164	70,789	4.41
<b>Products of forest:</b>				
Lumber.....	241,486	22,057	263,523	16.41
Logs.....	134,830		134,830	8.40
Shingles.....	16,196	3,990	20,186	1.26
<b>Manufactures:</b>				
Petroleum and other oils.....	5,374	9,048	14,422	.90
Other castings and machinery.....	7,566	7,929	15,495	.97
Cement, brick and lime.....	12,376	5,995	18,371	1.15
Agricultural implements.....	617	1,633	2,250	.14
Wagons, carriages, tools, etc.....	2,394	960	3,354	.21
Wines, liquors and beers.....	2,323	2,651	4,974	.31
Household goods and furniture.....	6,640	2,266	8,906	.56
Other manufactures.....	40,175	18,986	59,161	3.69
<b>Merchandise.....</b>	89,922	77,519	167,441	10.13
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	164,808	31,211	196,019	12.13
<b>Total tonnage.....</b>	<b>1,040,356</b>	<b>565,522</b>	<b>1,605,878</b>	<b>100 00</b>

## ADDITIONAL QUESTIONS.

*Fast freight lines.*

To what fast freight lines or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

Name of company.	General office.	Amount paid.
Arms' Palace Horse Car Co. ....	Chicago, Ill. ....	\$7 77
American Refrigerator Transit Co. ....	St. Louis, Mo. ....	56 29
Armour Refrigerator Line .....	Chicago, Ill. ....	67 69
American Tank Line .....	Cleveland, Ohio. ....	2 04
American Live Stock Transit Co. ....	Chicago, Ill. ....	5 07
Burton Stock Car Co. ....	Chicago, Ill. ....	125 04
Barrett & Barrett Refrigerator Line. ....	Chicago, Ill. ....	5 80
Buckeye Transportation Co. ....	Cincinnati, Ohio. ....	3 29
Commerce Despatch .....	Indianapolis, Ind. ....	17 42
Chicago Car & Coal Co. ....	Chicago, Ill. ....	13 04
Canada Cattle Car Co. ....	Chicago, Ill. ....	60 60
Chicago Refrigerator Car Lines .....	Chicago, Ill. ....	932 51
Chicago & New York Refrigerator .....	Chicago, Ill. ....	5 15
Continental Fruit Express .....	Chicago, Ill. ....	29 11
California Fruit Express .....	Chicago, Ill. ....	7 70
Cudahy Milwaukee Refrigerator Line .....	S. Omaha, Neb. ....	86
Cleveland Provision Company .....	Cleveland, Ohio. ....	1 47
Cottolene Refrigerator Line .....	Chicago, Ill. ....	2 91
California Fruit Transportation Co. ....	Chicago, Ill. ....	21 59
Cold Blast Transportation Co. ....	Kansas City, Mo. ....	73
Anglo-American Provision Co. ....	Chicago, Ill. ....	1 55
Dold, J., Packing Co. ....	Kansas City, Mo. ....	1 92
Detroit Iron Furnace Co. ....	Detroit, Mich. ....	1 42
Goodell Refrigerator Line .....	Chicago, Ill. ....	2 12
Hicks Stock Car Co. ....	Chicago, Ill. ....	14 24
Hammond Refrigerator Line .....	Hammond, Ind. ....	65 41
Holmes & Adams .....	Cleveland, Ohio. ....	1 74
Hodgeman, G. B. & Co. ....	Sandusky, Ohio. ....	6 87
Heinz, H. J. ....	Pittsburg, Pa. ....	3 38
Heinz Pickle Refrigerator Line .....	Chicago, Ill. ....	99
International Fruit Dealers' Despatch .....	Chicago, Ill. ....	1 55
J. E. B. Furniture .....	Atlanta, Ga. ....	11 21
Jackson, Sharp & Co. ....	Wilmington, Del. ....	8 83
Kansas City Milling Co. ....	Kansas City, Mo. ....	3 39
Kingan Refrigerator Line .....	Indianapolis, Ind. ....	4 05
Kansas City Dressed Beef Line .....	Kansas City, Mo. ....	4 87
Kansas City Refrigerator Car Co. ....	Kansas City, Mo. ....	70 35
Lipton Refrigerator Line .....	Chicago, Ill. ....	3 06
Levy Packing Co. ....	Kansas City, Mo. ....	3 99
Live Poultry Transportation Co. ....	Chicago, Ill. ....	3 82
Mather Stock Car Co. ....	Chicago, Ill. ....	87 29
Merchants' Despatch Transportation Co. ....	New York City, N. Y. ....	2,926 81
Morris Refrigerator Line .....	Chicago, Ill. ....	11 66
Morris Coal & Transportation Co. ....	Cleveland, Ohio. ....	7 44
Manhattan Oil Co. ....	Lima, Ohio. ....	5 22
New England Car Co. ....	Boston, Mass. ....	71 23
National Despatch Line .....	St. Albans, Vt. ....	492 61
New York Despatch Refrigerator Line. ....	Chicago, Ill. ....	15 32
Overland Fruit Express .....	Buffalo, N. Y. ....	4 61
Osborne, Sagor Coal Transportation Co. ....	Cleveland, Ohio. ....	13 90
Paragon Refining Co. ....	Toledo, Ohio. ....	112 35
Peerless Tank Line .....	Cleveland, Ohio. ....	34 26
Producers' Oil Co. ....	Cleveland, Ohio. ....	3 43
Provision Dealers' Despatch .....	Chicago, Ill. ....	2 24
E. Foggan .....	Titusville, Pa. ....	3 45
Rock Falls Manufacturing Co. ....	Chicago, Ill. ....	76
Railway Car Association Refrigerator Line. ....	Lafayette, Ind. ....	1 75
Southern Iron Car Line .....	Atlanta, Ga. ....	24 20
Steets Western Stable Car Co. ....	Chicago, Ill. ....	47 71
Somers Coal Co. ....	Columbus, Ohio. ....	8 60

*Fast freight lines.—Continued.*

Name of Company.	General office.	Amount paid.
Sun Oil Line (Bay Terminal Railway) .....	Toledo, Ohio.....	\$38 55
Swift Refrigerator Line.....	Chicago, Ill.....	197 57
St. Charles Car Co.....	Houston, Texas.....	3 08
Shippers' Refrigerator Line.....	Chicago, Ill.....	4 13
South Eastern Line.....	Atlanta, Ga.....	5 59
St. Louis Refrigerator Car Co.....	St. Louis, Mo.....	33 33
Southern Despatch Lumber Co.....	Louisville, Ky.....	8 47
Union Refrigerator Transit Co.....	St. Louis, Mo.....	85 62
Union Tank Line.....	New York City, N. Y.....	785 01
W. P. Read & Co.....	Chicago, Ill.....	18 42
Wells & Clear.....	Lansing, Mich.....	1 74
Western Rolling Stock & Equipment Co.....	Chicago, Ill.....	1 38
White Star Transportation Co.....	Indianapolis, Ind.....	2 45
Weaver-Getz Co.....	Chicago, Ill.....	69
Total.....		\$6,637 52

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Co., pays \$42,000 per annum; general express business; handles its own freight.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

Western Union Telegraph Co., 587.86 miles.

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

## KILLED.

January 15th, Wm. Tuck, farmer, Cottrell's Crossing, Vassar. Trespasser; company not responsible; his own carelessness.  
 February 4th, Alex. Fowles, switchman, Saginaw Yard. Coupling cars; purely accidental.  
 March 23, Wm. Turner, Mayville. Trespasser; his own carelessness.  
 March 23, F. Madison, conductor, Flint. Coupling cars; purely accidental.  
 May 2, C. M. Reid, brakeman, Coleman. Thrown from car No. 7, run over; purely accidental.  
 June 27, Chas. Lasher, Redford Junction. Trespasser; company not responsible; his own carelessness.  
 July 17, Chas. Wright, Bay City. Highway collision; lack of caution on his part; company not responsible.  
 July 17, Jno. D. Pew and wife, farmer, Novi. Highway collision; lack of caution; company not responsible.  
 July 20, Jacob Murch, Saginaw. Trespasser; his own carelessness.  
 August 22, Hannah Maxwell and child, Lansing Siding. Trespassers; their own carelessness.  
 September 18, Thos. Brown, deaf mute, Mt. Pleasant. Trespasser; his own carelessness.  
 October 8, Jas. Welch, Mt. Morris. Trespasser; his own carelessness.  
 November 17, Deaf mute, name not learned, Detroit. Trespasser; his own carelessness.  
 December 29, Unknown man, Manistee Junction. Trespasser; his own carelessness.

## INJURED.

June 3, Geo. Hartman, sectionman, Juniata. Fell from car and both legs cut off; purely accidental.  
 July 1, Herman Parish, Bay City. Highway collision; from lack of caution on his part.



TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Coupling cars .....		2				
Falling from trains .....		1			1	
Highway crossings .....			3			1
Trespassers on tracks .....			10			
Total .....		3	13		1	1

SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year .....	16
Number of persons injured during the year .....	2
Number of casualties purely accidental .....	4
Number resulting from lack of caution, carelessness, or misconduct .....	4
Persons killed or injured while intoxicated .....	7
Trespassers and tramps killed or injured .....	7
Suicides .....	2

CLASSIFICATION OF EMPLOYÉS.

KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Brakemen .....	1		1
Conductors .....	1		1
Laborers .....		1	1
Yardmen .....	1		1
Total .....	3	1	4

STATE OF MICHIGAN, } ss.  
COUNTY OF SAGINAW, }

S. T. Crafo, General Manager, and C. S. McMillan, Auditor of the Flint & Pere Marquette Railroad Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

S. T. CRAPO, General Manager.  
C. S. McMILLAN, Auditor.

Subscribed and sworn to before me this 28th day of April, A. D. 1897.

EDWIN F. SAUNDERS,  
Notary Public in and for Saginaw Co., Mich.

**ANNUAL REPORT**  
OF THE  
**GOGEBIC & MONTREAL RIVER RAILROAD COMPANY,**

*For the year ending December 31, 1896.*

[Filed March 9, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President*, EDWIN H. ABBOT, Boston, Mass.  
*Vice President*, FREDERICK ABBOT, Milwaukee, Wis.  
*Secretary*, HOWARD MORRIS, Milwaukee, Wis.  
*Auditor*, ROBERT TOOMBS, Milwaukee, Wis.  
*Treasurer*, EDWIN H. ABBOT, Boston, Mass.  
*General Manager*, H. F. WHITCOMB, Milwaukee, Wis.  
*General Superintendent*, S. J. COLLINS, Milwaukee, Wis.  
*Division Superintendent*, A. R. HORN, Stevens Point.  
*Chief Engineer*, R. B. TWEEDY, Milwaukee, Wis.  
*Superintendent of Telegraph*, P. W. DREW, Milwaukee, Wis.  
*Cashier*, W. R. HANCOCK, Milwaukee, Wis.  
*General Passenger Agent*, J. C. POND, Milwaukee, Wis.  
*General Freight Agent*, J. C. McKINNON, Milwaukee, Wis.  
*Attorney*, T. H. GILL, Milwaukee, Wis.  
*Receivers*, H. F. WHITCOMB and HOWARD MORRIS, Milwaukee, Wis.

**DIRECTORS.**

EDWIN H. ABBOT, Cambridge, Mass.  
 FREDERICK ABBOT, Milwaukee, Wis.  
 THOMAS H. GILL, Milwaukee, Wis.  
 JOHN MARTIN, Milwaukee, Wis.  
 HOWARD MORRIS, Milwaukee, Wis.  
 Terms expire January 20, 1897.

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: December 27, 1883.  
 Number of stockholders at date of last election: 6.  
 Date of annual meeting of stockholders: First Wednesday after third Tuesday in January.  
 Fiscal year of company ends June 30.  
 General offices of the company are located at Milwaukee, Wis.

**GENERAL EXHIBIT.**

	Debit.	Credit.
Total earnings from operation.....		\$46,704 80
Total expenses, including taxes.....	\$42,617 79	
Net income.....		\$4,087 01
Balance for the year.....		\$4,087 01
Balance (profit and loss) last year.....	\$527 88	
Balance forward to next year.....		\$3,559 63

GOGEBIC & MONTREAL RIVER RAILROAD COMPANY. 231

CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

Branches.	Extensions and new sidings.	New buildings.	New fences.	Total.
Tilden Mine.....	\$5,420 71		\$73 18	\$5,493 89
Montreal Mine.....	1,638 42			1,638 42
Palms Mine.....	4,341 63			4,341 63
Standard Oil Co., Bessemer.....	158 92			158 92
Gogebic Lumber Co., Ironwood.....	213 10			213 10
Ironwood.....		\$49 90		49 90
Total charges.....	\$14,772 78	\$49 90	\$73 18	\$14,895 86
Total charges to property account as above.....				\$14,895 86
Net addition to property account.....				14,895 86

ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

PASSENGER EARNINGS.

Main line and branches:		
Local fares.....	\$2,770 80	
Through fares.....	1,470 00	
Total passenger fares.....	\$4,240 80	
Express and baggage.....	597 71	
Mails.....	316 29	
Total passenger department earnings.....		\$5,154 80
Per train mile.....	90 27	
Per mile of road.....	\$16 23	

FREIGHT EARNINGS.

Main line and branches:		
Local traffic.....	\$339 74	
Through traffic.....	40,520 21	
Total traffic.....	\$41,359 95	
Other sources, freight department.....	143 45	
Total freight department earnings.....		41,508 40
Per train mile.....	\$2 46	
Per mile of road.....	2,546 53	
Total transportation earnings, entire line.....		\$46,663 00
Transportation earnings per mile of road.....	\$2,862 76	
Transportation earnings per train mile.....	1 30	
Miscellaneous receipts from operating account, other than for transportation, as follows:		
From rents of tracks, yards and terminals.....	41 78	
From other sources.....	07	
Total.....		46,704 80
Total earnings from operation of road.....	\$46,704 80	
Total earnings per mile of road.....	2,865 32	
Total earnings per train mile.....	1 30	
Proportion of taxable earnings for Michigan.....	46,704 80	
Total taxable earnings per mile of road in Michigan.....	2,865 32	
Proportion of income for Michigan.....		\$46,704 80

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway .....	\$3,106 91
Renewals of rails .....	361 63
Renewals of ties .....	623 26
Repairs and renewals of bridges and culverts .....	4,640 66
Repairs and renewals of fences, road crossings, signs and cattle guards .....	51 36
Repairs and renewals of buildings and fixtures .....	751 76
Repairs and renewals of telegraph .....	37 71
Other expenses .....	184 59
<b>Total .....</b>	<b>\$9,757 94</b>

## MAINTENANCE OF EQUIPMENT.

Superintendence .....	\$110 80
Repairs and renewals of locomotives .....	1,685 52
Repairs and renewals of passenger cars .....	392 83
Repairs and renewals of freight cars .....	3,340 08
Repairs and renewals of work cars .....	127 41
Repairs and renewals of shop machinery and tools .....	233 41
<b>Total .....</b>	<b>\$5,860 05</b>

## CONDUCTING TRANSPORTATION.

Superintendence .....	\$261 25
Engine and roundhouse men .....	4,537 01
Fuel for locomotives .....	4,179 54
Water supply for locomotives .....	304 19
Oil, tallow and waste for locomotives .....	134 65
Other supplies for locomotives .....	29 04
Train service .....	2,537 02
Train supplies and expenses .....	557 19
Switchmen, flagmen and watchmen .....	1,715 86
Telegraph expenses .....	1,121 55
Station service .....	3,648 17
Station supplies .....	195 82
Car mileage—balance .....	439 94
Loss and damage .....	260 67
Injuries to persons .....	283 88
Clearing wrecks .....	66 00
Advertising .....	164 65
Outside agencies .....	1,234 37
Rents for tracks, yards and terminals .....	145 80
Rent of buildings and other property .....	201 98
<b>Total .....</b>	<b>\$22,018 58</b>

## GENERAL EXPENSES.

Salaries of general officers .....	\$1,239 59
Salaries of clerks and attendants .....	1,216 22
General office expenses and supplies .....	321 70
Insurance .....	156 97
Law expenses .....	164 56
Stationery and printing (general offices) .....	553 60
Other expenses .....	170 23
Taxes .....	1,158 35
<b>Total .....</b>	<b>\$4,981 22</b>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures .....	22.90	\$9,757 94
Maintenance of equipment .....	13.75	5,860 05
Conducting transportation .....	51.66	22,018 58
General expenses, including taxes .....	11.69	4,981 22
<b>Total operating expenses and taxes .....</b>	<b>100.00</b>	<b>\$42,617 79</b>
Operating expenses and taxes per mile of road .....		\$2,614 58
Operating expenses and taxes per train mile run, for trains earning revenue, 35,992 miles .....		118 41
Total proportion of expenses for Michigan .....		42,617 79
Percentage of expenses to earnings .....	91.25	
Net earnings per mile of road .....		250 74
Net earnings per train mile .....		11

DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Ironwood to Bessemer, June 6, 1887.

MAIN LINE.		Miles.
In Michigan, from Ironwood to Bessemer.....		6.86
BRANCHES.		
In Michigan, from Spurs to Mines.....		9.44
Total length of road belonging to this company in Michigan .....		16.30
Aggregate length in Michigan of sidings, spurs and other tracks not above enumerated....		13.12
Aggregate length of tracks in Michigan belonging to this company, computed as single track.....		29.42
Gauge of track, 4 feet 8½ inches.		

Number of bridges and trestles in Michigan.

	Number.	Aggregate Length, feet.
Wooden bridges.....	5	1,487.6
Iron bridges.....	2	227.0
Combination bridges.....	2	150.5
Total.....	9	1,865.1

Crossings.—Railroad and highway.

What railroads cross your road at grade in this State, and at what locality?

C. & N. W. R. R. at Bessemer.  
C. & N. W. R. N. at Palms Mine.  
Twin City Street R. R. at Ironwood.

What railroads cross your road either over or under your grade in this State, and where?  
Under:

C. & N. W. R. R. at Ironwood.  
C. & N. W. R. R. at Siemens.  
C. & N. W. R. R. at Bessemer.  
D. S. S. & A. R. R. west of Bessemer.

Number of crossings of highways at grade in this State.....	5
Number of crossings of highways at grade in this State at which there are gates or flagmen.....	1
Have safety guards been erected at overhead obstructions? Yes.	

Stations.

Number of stations on whole lines .....	2
-----------------------------------------	---

Employés.

Number of persons regularly employed on all roads operated by company, including officials	28
Classify your employés as per following list:	Number.
Brakemen.....	2
Conductors.....	2
Engineers.....	2
Firemen.....	2
Laborers.....	10
Shopmen.....	2
Yardmen.....	4
Others.....	4

REPAIRS AND RENEWALS.

Fencing in Michigan.

How many miles of fencing have you.....	337
-----------------------------------------	-----

*Road bed and track.*

Number of track sections in Michigan.....	3
Average lengths of sections, miles.....	5.26
Average number of men in each section gang.....	4
Number of new ties put in track in Michigan.....	2,630
Average number of new ties per mile of road.....	161
New rails put in track.....	236
Steel (tons 58 0040-2240) miles.....	1.34
Total miles of track laid with new rails.....	.67

*Bridges and culverts.*

Amount of trestle work replaced with earth during the year (linear feet).....	23.3
New bridges built during the year—number 2.	

Location.	Kind.	Material.	Month built.	feet in length.
Siemens.....	Riveted truss.....	Steel.....	July.....	125.0
Bessemer.....	Riveted truss.....	Steel.....	July.....	102.0

## MILEAGE, TRAFFIC, ETC.

*Train mileage.*

	In Michigan.
Miles run by passenger trains during the year.....	19,093
Miles run by freight trains during the year.....	16,899
Total mileage of trains earning revenue.....	35,992

*Passenger traffic.—In State of Michigan.*

	Numbers.	Miles.	Rate.
Number of through passengers carried, earning revenue.....	18,523		
Number of local passengers carried, earning revenue.....	15,017		
Total number of passengers carried earning revenue.....	33,570		
Number of passengers carried one mile.....		144,139	
Average distance carried.....		4.29	
Average amount received from each passenger.....			\$0 12.632
Average receipts per mile for through passengers.....			02.976
Average receipts per mile for local passengers.....			02.924
Average receipts per passenger per mile for all passengers.....			02.942

*Freight traffic.—In State of Michigan.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	745,528		
Number of tons of local freight carried, earning revenue.....	1,176		
Total tons of freight carried, earning revenue.....	746,704		
Total mileage of through freight.....		4,159,292	
Total mileage of local freight.....		7,056	
Total freight mileage or tons carried one mile.....		4,166,348	
Average ton haul for through freight.....		5.58	
Average ton haul for local freight.....		6.00	
Average ton haul for all freight.....		5.58	
Average amount received for each ton haul.....			\$0 05.539
Average receipts ton per mile, for through freight.....			00.974
Average receipts ton per mile, for local freight.....			11.901
Average receipts ton per mile, for all freight.....			00.983

**GOGEBIC & MONTREAL RIVER RAILROAD COMPANY. 235**

**FREIGHT TRAFFIC MOVEMENT.—IN STATE OF MICHIGAN.**

*(Company's material excluded.)*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	81	678	709	00.09
Flour.....	24	998	1,022	00.14
Other mill products.....	16	133	149	00.02
Hay.....	14	1,446	1,460	00.19
Tobacco.....	—	2	2	—
Fruit and vegetables.....	44	398	442	00.06
Potatoes.....	—	489	489	00.07
<b>Products of animals:</b>				
Live stock.....	42	182	224	00.08
Dressed meats.....	25	19	44	00.01
Other packing house products.....	12	47	59	00.01
Poultry, game and fish.....	—	7	7	—
Hides and leather.....	4	—	4	—
<b>Products of mines:</b>				
Anthracite coal.....	—	1,303	1,303	00.17
Bituminous coal.....	—	13,605	13,605	01.82
Ores.....	716,536	—	716,536	95.96
Stones, sand and other like articles.....	—	117	117	00.02
Salt.....	—	15	15	—
<b>Products of forest:</b>				
Lumber, lath and shingles.....	745	627	1,372	00.18
Charcoal.....	—	1	1	—
Other forest products.....	858	4,786	5,594	00.75
<b>Manufactures:</b>				
Petroleum and other oils.....	79	717	796	00.11
Sugar.....	—	40	40	00.01
Iron, pig and bloom.....	—	1	1	—
Iron and steel rails.....	—	7	7	—
Other castings and machinery.....	109	117	226	00.03
Bar and sheet metal.....	—	31	31	—
Cement, brick, and lime.....	20	108	128	00.02
Agricultural implements.....	1	1	2	—
Wagons, carriages, tools, etc.....	—	8	8	—
Wines, liquors and beers.....	—	580	580	00.06
Household goods and furniture.....	56	71	127	00.01
Tile.....	1	—	1	—
<b>Merchandise.....</b>	<b>101</b>	<b>718</b>	<b>819</b>	<b>00.11</b>
<b>Ice.....</b>	<b>—</b>	<b>76</b>	<b>76</b>	<b>00.01</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	415	293	708	00.10
<b>Total tonnage.....</b>	<b>719,133</b>	<b>27,571</b>	<b>746,704</b>	<b>100.00</b>

**ADDITIONAL QUESTIONS.**

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The National Express Company who pays a fixed amount per annum in monthly installments.

A general express business.

At the depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

13.72 miles, owned jointly by Western Union Telegraph Company and this company.

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

## INJURED.

February 15, Otto C. Spindler, passenger brakeman, Bessemer. Scalded by steam from hose coupling.  
 March 14, Mrs. J. Burns, passenger, Ironwood. Bruised; jumping from train while in motion.  
 April 9, Chas. Murphy, bridgeman, Bessemer. Bruised; fell from bridge.  
 May 29, E. D. Tarboss, switchman, Ironwood. Finger crushed; coupling cars.  
 July 21, Mike Rose, Bessemer, section laborer. Back and side injured; run over by hand car.  
 August 23, V. E. Cunningham, switchman, Bessemer. Breast injured; struck by crank on derrick.  
 September 23, E. Gage, switchman, Bessemer. Body squeezed; caught between cars on side track and main track.  
 October 13, Otto Wure, foreman, Bessemer. Head cut; track spread letting cars down dump.  
 October 16, Geo. Bennett, section laborer, Ironwood. Head cut; shunk of clay struck him.  
 December 15, Joe Guigere, warehouseman, Ironwood. Foot crushed by trunk falling on it.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Coupling cars.....					1	
Deraillments.....					1	
Getting on and off trains.....				1		
Miscellaneous.....					7	
Total.....				1	9	

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons injured during the year..... 10  
 Number of casualties purely accidental..... 10

## CLASSIFICATION OF EMPLOYÉS.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....		1	
Brakemen.....		1	
Laborers.....		4	
Yardmen.....		3	
Total.....		9	

STATE OF WISCONSIN, } ss.  
 COUNTY OF MILWAUKEE, }

Frederick Abbot, vice president, and Robert Toombs, auditor of the Gogebic & Montreal River Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

FRED'K ABBOT, Vice President.  
 R. TOOMBS, Auditor.

Subscribed and sworn to before me this 6th day of March, A. D. 1897.

[L. S.]

EDGAR C. HOE,  
 Notary Public, Milwaukee County, Wisconsin.



ANNUAL REPORT  
OF THE  
GOGEBIC & MONTREAL RIVER RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed March 9, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, EDWIN H. ABBOT, Boston, Mass.  
*Vice President*, FRED'K ABBOT, Milwaukee, Wis.  
*Secretary*, HOWARD MORRIS, Milwaukee, Wis.  
*Treasurer*, EDWIN H. ABBOT, Boston, Mass.

DIRECTORS.

EDWIN H. ABBOT, Cambridge, Mass.  
FRED'K ABBOT, Milwaukee, Wis.  
THOS. H. GILL, Milwaukee, Wis.  
JOHN MARTIN, Milwaukee, Wis.  
HOWARD MORRIS, Milwaukee, Wis.  
Terms expire January 20, 1897.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: December 27, 1883.  
Number of stockholders at date of last election: 6.  
Date of annual meeting of stockholders: First Wednesday after third Tuesday in January.  
Fiscal year of company ends June 30.  
General offices of the company are located at Milwaukee, Wis.

REMARKS.

Road leased for 999 years to the Penokee Railroad Co. September 1, 1886. All rights and interest under said lease assigned by Penokee Railroad Company to Wisconsin Central Company May 31, 1888.

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association .....		\$900,000 00
Par value of shares .....	\$100 00	
Number of shares issued .....	6,000	
Amount paid in on common .....		\$600,000 00
Total amount paid in as per books of the company .....		600,000 00
Paid in per mile of road owned by company .....		<u>26,809 82</u>

## MICHIGAN RAILROAD RETURNS, 1896.

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage bonds, September 1, 1886.....	5%	March 1, 1887....	New York City...	\$300,000 00
Income bonds, September 1, 1886.....	5%	March 1, 1887....	New York City...	130,000 00
Total funded debt.....				\$520,000 00

## RECAPITULATION.

Total funded debt.....	\$520,000 00
Total debt liabilities.....	520,000 00
Amount of debt liabilities per mile of road, (16.30 miles).....	\$1,801 00
Total amount of stock and debt.....	1,120,000 00
Stock and debt per mile of road.....	68,711 66

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
June 6, 1887.

## MAIN LINE.

	Miles.	Miles.
Length completed in Michigan .....		6.86

## BRANCHES.

In Michigan spurs to mines.....		9.44
Total length of road belonging to this company in Michigan.....	16.30	
Same in Michigan.....		16.30
Aggregate length of sidings, spurs, and other track not above enumerated .....	13.12	
Aggregate length of tracks belonging to this company, computed as single track.....		29.42

Gauge of track, 4 feet 8½ inches.

STATE OF WISCONSIN, }  
COUNTY OF MILWAUKEE, } ss.

Frederick Abbot, vice president of the Gogebic & Montreal River Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declares them to be a true, full and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of his knowledge and belief.

Signed,

[L. S. OF R. E.]

FRED'K ABBOT, *Vice President.*

Subscribed and sworn to before me this 6th day of March, A. D. 1897.

[L. S.]

EDGAR C. HOE,

*Notary Public, Milwaukee County, Wis.*

# ANNUAL REPORT OF THE GRAND RAPIDS & INDIANA RAILWAY COMPANY,

*For the year ending December 31, 1896.*

[Filed May 1, 1897.]

## OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, JAMES MCCREA, Pittsburgh, Pa.  
*Vice President and Treasurer*, W. R. SHELBY, Grand Rapids, Mich.  
*Secretary and Auditor*, R. E. METHEANY, Grand Rapids, Mich.  
*General Manager*, J. H. P. HUGHART, Grand Rapids, Mich.  
*General Counsel*, T. J. O'BRIEN, Grand Rapids, Mich.  
*Division Superintendents*,  
     W. B. STIMSON, Grand Rapids, Mich.  
     P. S. O'ROURKE, Fort Wayne, Ind.  
*Chief Engineer*, THOMAS RODD, Pittsburgh, Pa.  
*Superintendent of Telegraph*, A. M. SCHOYER, Pittsburgh, Pa.  
*General Passenger and Ticket Agent*, C. L. LOCKWOOD, Grand Rapids, Mich.  
*General Freight Agent*, E. C. LEAVENWORTH, Grand Rapids, Mich.

## DIRECTORS.

JAMES MCCREA, Pittsburgh, Pa.  
 J. T. BROOKS, Pittsburgh, Pa.  
 JNO. E. DAVIDSON, Pittsburgh, Pa.  
 JOSEPH WOOD, Pittsburgh, Pa.  
 W. R. SHELBY, Grand Rapids, Mich.  
 T. J. O'BRIEN, Grand Rapids, Mich.  
 H. J. HOLLISTER, Grand Rapids, Mich.  
 Terms expire March 2, 1898.

## STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: July 11, 1896.  
 Number of stockholders at date of last election: 184.  
 Number of stockholders in Michigan at same date: 3.  
 Amount of full paid stock held in Michigan at same date: \$167,000.  
 Date of annual meeting of stockholders: First Wednesday in March.  
 Fiscal year of company ends December 31.  
 General offices of the company are located at Grand Rapids, Mich.

## GENERAL EXHIBIT.

*For the period January 1, to July 31, 1896.*

Total earnings from operation .....		\$1,142,241 43
Total expenses, included taxes .....	\$862,027 25	
Net income .....		\$180,214 18
Interest on funded debt .....	283,040 81	
Interest on unfunded debt .....	39,763 80	
Balance for the year .....	162,589 93	
Balance (profit and loss) last year .....	3,797,175 01	
Items not included in above, as follows:		
Old accounts paid .....	1,282 69	
Construction and equipment charged to income .....	29,652 32	
Balance forward to next year .....		3,990,699 95
	\$3,990,699 95	\$3,990,699 95

## GENERAL EXHIBIT.

For the period August 1, to December 31, 1896.

	Debit.	Credit.
Total earnings from operation.....		\$923,373 16
Total expenses, including taxes .....	\$741,084 29	
Net income.....		\$182,288 87
Interest on funded debt.....	180,451 66	
Interest on unfunded debt.....	5,578 53	
Balance for the year.....		3,736 32
Balance forward to next year.....	\$186,025 19	\$186,025 19

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association .....		\$6,000,000 00
Par value of shares.....	\$100 00	
Number of shares issued .....	55,697	
Amount paid in on common.....	\$5,569,700 00	
Total amount paid in, as per books of the company.....		5,569,700 00
Paid in per mile of road owned by company, 434.69 miles.....		12,813 04

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage, Oct. 1, 1899.....	7%	Oct. 1, 1899.....	New York.....	\$12,000 00
F. M. land grant, Oct. 1, 1899.....	7%	Oct. 1, 1899.....	New York.....	86,000 00
F. M. land grant guaranteed, Oct. 1, 1899.....	7%	Oct. 1, 1899.....	New York.....	1,367,000 00
F. M. guaranteed extended, Oct. 1, 1899.....	7%	July 1, 1941.....	New York.....	3,959,000 00
Second mortgage, Aug. 1, 1896.....	4%	Oct. 1, 1936.....	Philadelphia.....	3,962,000 00
Total funded debt.....				\$9,387,000 00

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For equipment.....		\$3,454 71
For real estate.....		150,000 00
For miscellaneous.....		340,431 13
For current balances.....	Pay rolls, vouchers and interest on debt.....	345,532 05
Total unfunded debt.....		\$839,417 89

## RECAPITULATION.

Total funded debt.....	\$9,387,000 00
Total unfunded debt.....	839,417 89
Total debt liabilities.....	\$10,176,417 89
Amount of debt liabilities per mile of road, 434.69 miles.....	23,410 74
Total amount of stock and debt.....	15,746,117 89
Stock and debt per mile of road, 434.69 miles.....	26,223 78

## GENERAL BALANCE SHEET.—Dr.

Construction account.....		\$15,056,700 00
Cash items:		
Cash.....	\$407,675 06	
Due from agents.....	69,080 55	
		476,755 61
Other assets:		
Materials and supplies.....	\$137,789 96	
Debit balances from companies and individuals.....	77,872 80	
		\$215,662 76
Total.....		\$15,749,128 87

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....		\$5,569,700 00
Funded debt.....		9,837,000 00
Unfunded debt:		
Interest unpaid.....	\$161,891 17	
Vouchers and accounts.....	163,640 88	
Other liabilities (list as follows:)		
Mortgage on real estate.....	150,000 00	
Due other companies.....	71,625 00	
Equipment notes.....	8,454 71	
Assessment on third mortgage bonds of G. R. & I. R. R. Co.....	174,846 85	
Excess of current assets of G. R. & I. R. R. Co. applicable to payment of unadjusted current liabilities of G. R. & I. R. R. Co.....	94,459 28	
		889,417 89
Profit and loss or income accounts.....		8,010 48
Total.....		\$15,749,128 87

## COST OF ROAD AND EQUIPMENT.

When purchased: August 1, 1896.	
Original cost to present company, of road and equipment.....	\$15,056,700 00
Total cost to date of report.....	15,056,700 00
Average cost per mile of road (not including sidings).....	84,687 79
Proportion of cost for Michigan.....	13,877,612 53

Total transportation earnings, entire line.....	\$2,045,802 35
Transportation earnings per mile of road.....	4,111 88
Transportation earnings per train mile.....	1 17
Miscellaneous receipts from operating account, other than for transportation, as follows:	
From telegraph companies.....	\$10,214 88
From rents of tracks, yards and terminals.....	7,999 80
From rents not otherwise provided for.....	1,597 61
<b>Total.....</b>	<b>19,812 24</b>
Distribution of miscellaneous earnings between main line and leased or proprietary roads:	
Company:	Total miscellaneous. Proportion
Grand Rapids & Indiana Railroad.....	\$19,313 45 \$18,667 15
Muskegon, Grand Rapids & Indiana Railroad.....	260 70 260 70
Traverse City Railroad.....	238 09 238 09
<b>Total earnings from operation of road.....</b>	<b>\$2,065,614 59</b>
<b>Total earnings per mile of road.....</b>	<b>4,151 65</b>
<b>Total earnings per train mile.....</b>	<b>1 18</b>
<b>Proportion of taxable earnings for Michigan.....</b>	<b>1,775,098 17</b>
<b>Total taxable earnings per mile of road in Michigan.....</b>	<b>4,007 17</b>
<b>Total income from all sources.....</b>	<b>\$2,065,614 59</b>
<b>Proportion of income for Michigan.....</b>	<b>1,775,098 17</b>

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway.....	\$159,615 44
Renewals of rails.....	71,595 74
Renewals of ties.....	87,490 41
Repairs and renewals of bridges and culverts.....	14,813 11
Repairs and renewals of fences, road crossings, signs and cattle guards.....	12,849 32
Repairs and renewals of buildings and fixtures.....	30,387 18
Repairs and renewals of docks and wharves.....	188 68
Repairs and renewals of telegraph.....	4,380 40
Stationery and printing.....	35 18
Other expenses.....	1,866 74
<b>Total.....</b>	<b>\$383,184 20</b>

## MAINTENANCE OF EQUIPMENT.

Superintendence.....	\$9,642 97
Repairs and renewals of locomotives.....	120,926 37
Repairs and renewals of passenger cars.....	63,627 14
Repairs and renewals of freight cars.....	129,140 01
Repairs and renewals of work cars.....	6,152 07
Repairs and renewals of shop machinery and tools.....	3,154 72
Stationery and printing.....	747 54
Other expenses.....	4,598 07
<b>Total.....</b>	<b>\$337,928 89</b>

## CONDUCTING TRANSPORTATION.

Superintendence.....	\$36,592 84
Engine and roundhouse men.....	26,455 07
Fuel for locomotives.....	170,818 33
Water supply for locomotives.....	8,839 47
Oil, tallow and waste for locomotives.....	5,343 57
Other supplies for locomotives.....	1,428 90
Train service.....	234,135 77
Train supplies and expenses.....	23,894 01
Switchmen, flagmen and watchmen.....	67,387 65
Telegraph expenses.....	28,290 25
Station service.....	143,688 48
Station supplies.....	15,477 97
Switching charges—balance.....	1,020 66
Car mileage—balance.....	21,332 05
Hire of equipment.....	2,076 77
Loss and damage.....	4,558 90
Injuries to persons.....	6,430 11
Clearing wrecks.....	2,384 76
Advertising.....	9,360 44
Outside agencies.....	20,156 96
Rents for tracks, yards and terminals.....	34,537 44
Rent of buildings and other property.....	1,597 19
Stationery and printing.....	13,147 08
Other expenses.....	986 57
<b>Total.....</b>	<b>\$377,899 87</b>

## GENERAL EXPENSES.

Salaries of general officers .....	\$16,426 61
Salaries of clerks and attendants .....	31,188 18
General office expenses and supplies .....	4,589 09
Law expenses .....	2,919 47
Stationery and printing (general offices) .....	5,292 92
Other expenses .....	2,788 56
Taxes .....	80,993 20
<b>Total .....</b>	<b>\$124,098 58</b>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures .....	22.24	\$383,184 20
Maintenance of equipment .....	19.61	337,928 80
Conducting transportation .....	50.95	877,600 87
General expenses, including taxes .....	7.20	124,098 58
<b>Total operating expenses and taxes .....</b>	<b>100.00</b>	<b>\$1,722,811 54</b>
Operating expenses and taxes per mile of road, 497.54 miles .....		\$3,463 26
Operating expenses and taxes per train mile run, for trains, earning revenue, 1,754,296 miles .....		98
Proportion of operating expenses and taxes for Michigan, main line .....		1,304,973 58
Leased or proprietary roads:		
Muskegon, Grand Rapids & Indiana R. R. ....		90,280 09
Traverse City Railroad .....		37,657 80
<b>Total proportion of expenses for Michigan .....</b>		<b>\$1,522,891 47</b>
Percentage of expenses to earnings .....	88.42	
Net earnings per mile of road .....		672 31
Net earnings per train mile .....		19

## DESCRIPTION OF ROAD.

## Date when the road was opened for use between its present termini:

From Fort Wayne, Indiana, to Mackinaw City, Michigan, July, 1882.  
 From Milton Junction, Michigan, (branches to Carey, Michigan, 1882.  
 From Kalamazoo, Michigan, to Harbor Springs, Michigan, 1882.  
 From Muskegon Junction, Michigan, to Lake City, Michigan, 1890.  
 From Jennings Spur Junction, Michigan, to Jennings, Michigan, 1882.  
 From Lake City, Michigan, to 5.39 miles east of Lake City, Michigan, 1894.  
 From 4.67 miles east of Lake City, Michigan, to 1.69 miles south of Herrick's Spur, Michigan, 1894.  
 From Oshtemo Junction, Michigan, to Olga, Michigan, 1885.  
 From Big Rapids, Michigan, to Vincent, Michigan, 1890.  
 From Bear Lake Junction, Michigan, to Bear Lake, Michigan, 1892.

## MAIN LINE.

	Miles.	Miles
In Michigan, from Indiana state line to Mackinaw City .....	313.48	
In Indiana, from Fort Wayne to Michigan state line .....	53.11	
<b>Total length completed .....</b>		<b>366.59</b>
Length of double track on main line .....	8.10	

## BRANCHES.

Muskegon Branch, from Muskegon Junction to Lake City .....	11.59	
Muskegon Branch, from Herrick Spur—from Lake City—to 5.39 miles east of Lake City .....	5.39	
Muskegon Branch, from Vassar Co. Spur—4.67 miles east of Lake City—to 1.69 miles south of Herrick's Spur .....	1.69	
Muskegon Branch, from Jennings Spur—from Jennings Spur Junction—to Jennings .....	3.0	
Manistee Branch, from Milton Junction to Carey .....	14.54	
Manistee Branch, from Haak's Spur—Haak's Spur Junction—to Haak's Mill .....	4.09	
Oshtemo Branch, from Oshtemo Junction to Olga .....	9.78	
Harbor Springs Branch, from Kalamazoo to Harbor Springs .....	5.76	
Ludington Branch, from Stinson Junction to Merritt .....	5.84	
Plaster Mill Spur, from Bartlett Street Junction to South Grand Rapids .....	3.93	
Bear Lake Branch, from Bear Lake Junction to Bear Lake .....	1.07	
<b>Total length of branches owned by company .....</b>		<b>66.65</b>
<b>Total length of branches owned by company in Michigan .....</b>	<b>66.65</b>	
Total length of road belonging to this company .....		436.34
Total length of road belonging to this company in Michigan .....		380.13
Aggregate length of sidings, spurs and other tracks not above enumerated .....		117.29
Aggregate length of tracks in Michigan belonging to this company, computed as single track, including 8.10 miles double track .....		500.52
Gauge of track, 4 feet 9 inches.		

## MICHIGAN RAILROAD RETURNS, 1896.

*Proprietary or leased roads operated by this company.*

Name, description and length of each:	miles. In Michigan.	
Muskegon, Grand Rapids & Indiana Railroad.....	86.85	86.85
Traverse City Railroad.....	26.00	26.00
Cincinnati, Richmond & Fort Wayne Railroad.....	85.60	
Total.....	148.45	63.85
Total miles operated by the company.....	584.79	443.96

*Number of bridges and trestles in Michigan.*

	Number.	Aggregate Length, feet.
Wooden bridges.....	8	615.0
Stone bridges.....	1	18.8
Iron bridges.....	20	1,359.5
Combination bridges.....	7	1,075.0
Wooden trestles.....	141	11,052.0
Total.....	177	14,120.3

*Crossings.—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?

L. S. & M. S. R. R. at Sturgis, Plainwell, Kalamazoo and Grand Rapids.  
 Michigan Central R. R. at Wasopi and Kalamazoo.  
 Chicago & Grand Trunk R. R. at Vicksburgh.  
 C. J. & M. R. R. at Monticello.  
 C. & W. M. R. R. at Grand Rapids, Mill Creek, Fruitport Junction, Muskegon and Traverse City.  
 Detroit, Grand Haven & Milwaukee R. R. at Grand Rapids.  
 Detroit, Grand Rapids & Western R. R. at Grand Rapids and Big Rapids.  
 Toledo, Saginaw & Muskegon R. R. at Cedar Springs.  
 Flint & Pere Marquette R. R. at Reed City.  
 Ann Arbor R. R. at Cadillac.  
 C. & N. E. R. R. at Cadillac.  
 Kalkaska Lumber Co. R. R. at Kalkaska.  
 Marcellona & Northwestern R. R. at Marcellona.  
 Frederick & Charlevoix R. R. at Alba.

What railroads cross your road either over or under your grade in this State, and where?

Over:  
 Detroit, Grand Haven & Milwaukee R. R. near Kinney.

At what crossings are interlocking and derailing switches in operation?

Michigan Central R. R. at Wasopi and Kalamazoo.  
 C. & W. M. R. R. at Grand Rapids and Traverse City.  
 D. G. R. & W. R. R. at Grand Rapids.  
 Toledo, Saginaw & Muskegon R. R. at Cedar Springs.  
 Ann Arbor R. R. at Cadillac.  
 C. & N. E. R. R. at Cadillac.  
 Kalkaska Lumber Co. R. R. at Kalkaska.  
 M. & N. E. R. R. at Marcellona.  
 Frederick & Charlevoix R. R. at Alba.

What pattern or patterns have you adopted?

Union Switch and Signal Co., Gravitt, Wharton, Johnson, Allentown.

Number of crossings of highways at grade in this State.....	560
Number of crossings of highways at grade in this State at which there are gates or flagmen.....	43
Number of crossings of highway over or under railroad: over 5; under 2.....	7
Number of highway bridges 18 feet above track.....	5

Have safety guards been erected at overhead obstructions?

Yes.

Are your frogs and guard rails blocked as required by act 174, session laws 1883?

Yes.

How are they treated?

Wooden blocks.

*Stations.*

Number of stations on whole line.....	150
Same in Michigan.....	122

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials.....	2,265
Same in Michigan.....	1,971



# GRAND RAPIDS & INDIANA RAILWAY COMPANY.

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Classify your employes as per following list:

	Number.
Baggagemen .....	24
Brakemen .....	131
Conductors .....	62
Engineers .....	92
Firemen .....	93
Laborers .....	520
Shopmen .....	306
Yardmen .....	143
Others .....	889

## REPAIRS AND RENEWALS.

### Fencing in Michigan.

How many miles of fencing have you? .....	387
Give the number of miles required to complete fence both sides of your track in Michigan, and the counties in which needed:	
Newaygo, Mecosta, Osceola, Lake, Wexford, Missaukee, Grand Traverse, Emmet.....	46

### Road bed and track.

Number of track sections in Michigan.....	97
Average lengths of sections, miles.....	4.6
Average number of men in each section gang.....	2.87
Number of new ties put in whole line during the year.....	261,086
Number of new ties put in track in Michigan.....	214,227
Average number of new ties per mile of road.....	449
New rails put in track:	
Steel, tons, 3,297.599 miles.....	29.99
Total miles of track laid with new rails.....	29.99

### Bridges and culverts.

Amount of trestle work replaced with earth during the year, linear feet.....	398
Timber culverts replaced during the year:	
With iron pipe—number.....	16
With sewer pipe—number.....	5
With timber—number.....	9
New bridges built during the year—number.....	8

Location.	Kind.	Material.	Month built.	Feet in length.
North of M. P., 31.....	Trestle timber	Timber	August.....	73
North of M. P., 118.....	Trestle timber	Timber	November.....	14
D., G. H. & M. Junction.....	Trestle piles	Timber	October.....	60
Cedar Springs.....	Trestle piles	Timber	.....	48
Morley.....	Trestle piles	Timber	Aug. and Sept.....	173
Herrick's Branch.....	Trestle piles	Timber	April.....	64
West of M. P., 15.....	Trestle piles	Timber	September.....	24

## ROLLING STOCK.

		Present esti- Number. mated value.
Number of locomotives of more than 30 tons weight, exclusive of tender.....	62	\$408,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender.....	1	8,000 00
Total.....	63	\$406,000 00
Number of passenger cars—12-wheel, including official cars.....	19	57,000 00
Number of passenger cars—8-wheel, including official cars.....	50	125,000 00
Number of express and baggage cars.....	22	55,000 00
Number of box freight cars.....	1,352	405,800 00
Number of stock cars.....	49	14,700 00
Number of platform cars.....	1,363	340,750 00
Number of ore cars.....	69	17,250 00
Number of conductors' way cars.....	52	13,000 00
Other cars.....	34	17,000 00
Derrick.....	3	
Pile driver.....	1	
Inspection car.....	1	
Total.....	5	2,500 00
Total.....	3,015	\$1,453,800 00

Number of locomotives equipped with power brakes.....	63
Number of passenger-train cars equipped with power brakes.....	92
Number of freight cars equipped with power brakes.....	580

What patterns of power brakes have you in use, and number of locomotives and cars with each?  
All Westinghouse.

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?  
Yes.

What pattern or patterns have you adopted for use?  
Janney.

How are your passenger cars heated.  
Steam.

## MILEAGE TRAFFIC, ETC.

*Train mileage.*

	Entire lines. In Michigan.	
Miles run by passenger trains during the year.....	895,764	774,590
Miles run by freight trains during the year.....	774,309	642,890
Miles run by mixed trains.....	84,073	84,073
Total mileage of trains earning revenue.....	1,754,236	1,501,513

*Passenger traffic.—Entire lines.*

	Numbers.	Miles.	Rate.
Number of through passengers carried, earning revenue.....	49,975		
Number of local passengers carried earning revenue.....	908,344		
Total number of passengers carried, earning revenue.....	958,319		
Number of passengers carried one mile.....	28,257,238		
Average distance carried.....		29.48	
Average amount received from each passenger.....			\$0 64
Average receipts per mile for through passengers.....			2.019
Average receipts per mile for local passengers.....			2.152
Average receipts per passenger per mile for all passengers.....			2.169

*Passenger traffic.—In State of Michigan.*

	Numbers.	Miles.	Rate.
Number of through passengers carried, earning revenue.....	50,089		
Number of local passengers carried, earning revenue.....	775,722		
Total number of passengers carried, earning revenue.....	825,811		
Number of passengers carried one mile.....	27,911,401		
Average distance carried.....		33.79	
Average amount received from each passenger.....			\$0 64
Average receipts per mile for through passengers.....			2.019
Average receipts per mile for local passengers.....			1.876
Average receipts per passenger per mile for all passengers.....			1.887

*Freight traffic.—Entire lines.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	167,759		
Number of tons of local freight carried, earning revenue.....	1,438,112		
Total tons of freight carried, earning revenue.....	1,605,871		
Total mileage of through freight.....		18,118,856	
Total mileage of local freight.....		136,597,762	
Total freight mileage or tons carried one mile.....		153,716,618	
Average ton haul for through freight.....		108.00	
Average ton haul for local freight.....		94.29	
Average ton haul for all freight.....		95.72	
Average amount received for each ton haul.....			\$0 82
Average receipts ton per mile, for through freight.....			00.726
Average receipts ton per mile, for local freight.....			00.872
Average receipts ton per mile, for all freight.....			00.855

*Freight traffic.—In State of Michigan.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	176,792		
Number of tons of local freight carried, earning revenue.....	1,192,594		
Total tons of freight carried, earning revenue.....	1,369,386		
Total mileage of through freight.....		18,883,852	
Total mileage of local freight.....		128,686,181	
Total freight mileage or tons carried one mile.....		145,550,033	
Average ton haul for through freight.....		106.81	
Average ton haul for local freight.....		106.21	
Average ton haul for all freight.....		106.29	
Average amount received for each ton haul.....			\$0.82
Average receipts ton per mile, for through freight.....			00.651
Average receipts ton per mile, for local freight.....			00.790
Average receipts ton per mile, for all freight.....			00.772

## FREIGHT TRAFFIC MOVEMENT.—ENTIRE LINES.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	21,926	24,309	46,235	2.88
Flour.....	11,175	98,640	109,815	6.84
Other mill products.....	4,464	22,248	26,712	1.66
Hay.....	3,797	15,613	19,410	1.21
Tobacco.....	82	1,992	2,074	.13
Fruit and vegetables.....	40,513	18,015	58,528	3.64
Other articles.....	1,418	9,458	10,876	.68
<b>Products of animals:</b>				
Live stock.....	4,587	1,603	6,190	.39
Dressed meats.....	1,040	4,594	5,574	.35
Other packing house products.....	76	275	351	.02
Poultry, game and fish.....	552	309	861	.05
Wool.....	303	307	610	.04
Hides and leather.....	1,845	2,957	4,802	.30
Other articles.....	1,658	517	2,175	.14
<b>Products of mines:</b>				
Anthracite coal.....	9	23,898	23,907	1.49
Bituminous coal.....	472	113,140	113,612	7.07
Coke.....	28	3,882	3,910	.24
Ores.....		55,888	55,888	3.48
Stone, sand and other like articles.....	36,318	3,273	39,591	2.47
Salt.....	278	5,656	5,934	.37
<b>Products of forest:</b>				
Lumber.....	225,008	126,635	351,638	21.91
Logs, shingles and other articles.....	362,288	93,421	455,659	28.38
<b>Manufactures:</b>				
Petroleum and other oils.....	2,503	14,029	16,534	1.03
Sugar.....	3,855	7,619	11,474	.71
Iron, pig and bloom.....	24,678	3,291	27,969	1.74
Iron and steel rails.....	1,629	3,939	5,568	.35
Other castings and machinery.....	7,888	15,937	23,825	1.48
Bar and sheet metal.....	894	14,218	15,112	.94
Cement, brick, and lime.....	4,630	12,386	17,016	1.06
Agricultural implements.....	1,021	2,216	3,237	.20
Wagons, carriages, tools, etc.....	3,697	861	4,558	.28
Wines, liquors and beers.....	3,185	2,666	5,851	.36
Household goods and furniture.....	20,421	5,332	25,753	1.60
Other manufactures.....	25,508	42,175	67,683	4.21
<b>Merchandise.....</b>	<b>7,646</b>	<b>5,706</b>	<b>13,352</b>	<b>.83</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	21,194	2,393	23,587	1.47
<b>Total tonnage.....</b>	<b>846,533</b>	<b>759,388</b>	<b>1,605,921</b>	<b>100.00</b>

## FREIGHT TRAFFIC MOVEMENT.—ENTIRE LINES.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	16,330	21,231	37,561	2.74
Flour.....	10,646	97,896	108,541	7.98
Other mill products.....	4,352	21,444	25,796	1.88
Hay.....	2,882	15,255	18,137	1.82
Tobacco.....	168	337	505	.04
Fruit and vegetables.....	39,615	14,968	54,583	3.98
Other articles.....	1,234	8,678	9,912	.72
<b>Products of animals:</b>				
Live stock.....	1,770	1,343	3,113	.23
Dressed meats.....	999	4,496	5,495	.40
Other packing house products.....	72	263	335	.02
Poultry, game and fish.....	198	261	459	.08
Wool.....	257	253	510	.04
Hides and leather.....	1,809	2,416	4,225	.31
Other articles.....	744	488	1,182	.09
<b>Products of mines:</b>				
Anthracite coal.....		3,115	3,115	.23
Bituminous coal.....		27,632	27,632	2.02
Coke.....		1,273	1,273	.09
Ore.....		55,768	55,768	4.07
Stone, sand and other like articles.....	33,780	1,669	35,449	2.59
Salt.....	375	4,801	5,176	.38
<b>Products of forest:</b>				
Lumber.....	223,692	104,674	328,366	23.98
Other articles.....	359,854	89,352	449,206	32.80
<b>Manufactures:</b>				
Petroleum and other oils.....	1,851	6,328	8,179	.60
Sugar.....	3,255	8,817	12,072	.92
Iron, pig and bloom.....	23,641	929	24,570	1.79
Iron and steel rails.....	1,653	3,545	5,198	.38
Other castings and machinery.....	5,776	6,610	12,386	.90
Bar and sheet metal.....	636	7,254	7,890	.58
Cement, brick and lime.....	4,048	7,521	11,569	.84
Agricultural implements.....	1,021	1,100	2,121	.15
Wagons, carriages, tools, etc.....	2,789	480	3,269	.24
Wines, liquors and beers.....	3,009	1,188	4,197	.31
Household goods and furniture.....	19,645	4,263	23,908	1.75
Other manufactures.....	23,988	25,390	49,378	3.61
<b>Merchandise.....</b>	<b>6,637</b>	<b>3,991</b>	<b>10,628</b>	<b>.78</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	20,523	2,159	22,682	1.66
<b>Total tonnage.....</b>	<b>817,249</b>	<b>552,137</b>	<b>1,369,386</b>	<b>100.00</b>

## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

Adams Express Co.; 47½ per cent of gross earnings. All freights received and delivered at depots. The above covers all lines operated by this company.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

	Miles.
Telegraph wire belonging to this company.....	977.8
Telegraph wire belonging to Grand Rapids Herald Co.....	142
Telegraph wire belonging to L. S. & M. S. B'y Co.....	3.5
Total.....	<u>1,123 3</u>

## TRANSPORTATION COMPANIES.

*Sleeping, drawing-room and palace car companies.*

What sleeping, drawing-room, chair or other palace passenger cars, not the exclusive property of your own or some other railroad company, have during the year been in use on your road in the State of Michigan, and on what terms? If rented by you, or allowed mileage between local points in this State, what was the amount paid for the use of such cars during the period under report?

	Amount paid.
Wagner Palace Car Co., New York, terms 1½ cents per mile.....	\$8,367 19
Pullman Palace Car Co., Chicago, terms 3 cents per mile.....	<u>1,197 00</u>

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

## KILLED.

March 17, Burt Hunt, Reed City. Lack of caution; highway crossing.  
 March 17, C. A. Lillie, Reed City. Lack of caution; highway crossing.  
 July 27, James Grummit, trespasser, near Rockford. Lack of caution; trespasser.  
 September 18, Chas. Hawkins, trespasser, near Petoskey. Lack of caution; trespasser.  
 October 5, D. Cupples, employé, near Missaukee Junction. Train struck hand car, carelessness.  
 October 6, John Hobbins, employé, Grand Rapids. Stepped on track ahead of engine. Lack of caution.  
 October 25, D. Van Middlesworth, Grand Rapids. Highway collision; lack of caution.  
 October 31, James Vent, Brutus. Fell from train; trespasser.

## INJURED.

January 8, Jno. Miene, brakeman, Conklin. Fell off car; accidental.  
 January 20, S. B. Ellsworth, brakeman, Tustin. Coupling, lack of caution.  
 January 21, A. J. Bodway, switchman, Cadillac. Coupling; lack of caution.  
 January 31, W. S. Johnson, Oden. Fell from train, lack of caution.  
 February 2, W. E. Wiseman, brakeman, Cadillac. Climbing on car, carelessness.  
 February 3, Tim Shine, laborer, Farrington. Fell on track, accidental.  
 February 3, Wm. Swearing, brakeman, Petoskey. Coupling; lack of caution.  
 February 7, A. W. Losey, brakeman, Grand Rapids. Coupling, lack of caution.  
 February 7, Geo. Elliott, brakeman, Grand Rapids. Injured by truck, accidental.  
 February 12, Theodore Hill, Morley. Attempting coupling, trespasser.  
 February 13, C. Fish, brakeman, Big Rapids. Coupling; accidental.  
 February 21, D. Shannon, brakeman, Cedar Springs. Coupling, accidental.  
 February 24, Francis Powers, Grand Rapids. Climbing between cars, trespasser.  
 March 2, Geo. Dove, tramp, Milton Junction. Stealing ride, trespasser.  
 March 5, S. Etheridge, brakeman, Grand Rapids. Unloading freight, accidental.  
 March 24, Grace Burnham child, Grand Rapids. Highway crossing, trespasser.  
 March 24, Spencer Trill, Belmont. Jumped off engine, stealing ride, trespasser.  
 March 25, S. R. Scott, switchman, Grand Rapids. Coupling, accidental.  
 March 26, W. J. Ewase, brakeman, Grand Rapids. Coupling, accidental.  
 April 2, N. Yeakey, brakeman, Grand Rapids. Unloading freight, accidental.  
 June 10, F. Kounuran, laborer, Muskegon. Unloading rail, accidental.  
 June 19, F. Wright, brakeman, Big Rapids. Fell from car, accidental.  
 June 24, Geo. Young, tramp, Howard City. Stealing ride; trespasser.  
 July 7, F. S. Walters, switchman, Grand Rapids. Footboard on engine caught crossing plank; accidental.  
 July 16, R. F. Collins, engineer, Page. Derailment of train.  
 July 16, C. B. Royce, fireman, Page. Derailment of train.  
 July 18, Nicholas Hints, laborer, Manton. Clearing wreck; accidental.  
 July 18, Ellis Gamble, laborer, Manton. Clearing wreck; accidental.  
 July 22, Miss E. Surgeon, Big Rapids. Thrown from carriage.  
 July 22, Miss Lizzie Nichols, Muskegon. Lack of caution.  
 August 21, Paul Obershow, Milton Junction. Derailment of train; trespasser.  
 August 21, L. L. Smith, Jr., Milton Junction. Derailment of train; trespasser.  
 August 21, Bert Golden, Milton Junction. Derailment of train; trespasser.  
 August 21, Wm. Richards, Milton Junction. Derailment of train; trespasser.  
 August 21, Man, unknown, Milton Junction. Derailment of train; trespasser.  
 August 31, J. G. Hafer, switchman, Big Rapids. Coupling; lack of caution.  
 September 1, Fred Kommran, laborer, Belmont. Unloading ties; accidental.  
 September 19, F. Magnuson, Muskegon. Thrown from carriage.  
 October 5, Mrs. W. W. Whipple, passenger, Kalkaska. Fell off train; carelessness.  
 October 14, E. Smith, brakeman, Fife Lake. Coupling; carelessness.  
 November 23, Henry Raab, farmer, Cadillac. Climbing between cars; carelessness.  
 November 28, C. Fitz Patrick, Cadillac. Struck by engine while walking on track; carelessness.  
 December 10, C. Van Dervott, brakeman, Crofton. Train parted; accidental.  
 December 23, Jno. Hendrickson, Grand Rapids. Unloading freight; accidental.  
 December 30, A. N. Fish, brakeman, Crofton. Coupling; carelessness.

## MICHIGAN RAILROAD RETURNS, 1896.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....		1				
Coupling cars.....					11	1
Derailments.....					2	5
Falling from trains.....			1	1	2	1
Highway crossings.....			3			1
Miscellaneous.....		1			11	6
Trespassers on trains.....						3
Trespassers on tracks.....			2			1
Total.....		2	6	1	28	18

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year.....	8
Number of persons injured during the year.....	45
Number of casualties purely accidental.....	19
Number resulting from lack of caution, carelessness or misconduct.....	20
Trespassers and tramps killed or injured.....	14

## CLASSIFICATION OF EMPLOYÉS.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Brakemen.....	2	13	15
Engineers.....		1	1
Firemen.....		1	1
Laborers.....		5	5
Yardmen.....		4	4
Not classified above.....		2	2
Total.....	2	26	28

STATE OF MICHIGAN, } ss.  
COUNTY OF KENT, }

W. R. Shelby, vice-president, and E. R. Metheany, auditor of the Grand Rapids & Indiana Railway Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF E. R.]

Signed,

W. R. SHELBY, *Vice-president.*R. R. METHEANY, *Auditor.*

Subscribed and sworn to before me this 29th day of April, A. D. 1897.

[L. S.]

FRANK L. DANFORTH,  
*Notary Public, Kent County, Michigan.*

ANNUAL REPORT  
OF THE  
MUSKEGON, GRAND RAPIDS & INDIANA RAILROAD  
COMPANY.

*For the year ending December 31, 1896.*

[Filed May 8, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, W. O. HUGHART, Grand Rapids, Mich.  
*Secretary*, R. R. METHEANY, Grand Rapids, Mich.  
*Treasurer*, W. R. SHELBY, Grand Rapids, Mich.  
*Transfer Agent*, R. R. METHEANY, Grand Rapids, Mich.

DIRECTORS.

W. O. HUGHART, Grand Rapids, Mich.  
W. R. SHELBY, Grand Rapids, Mich.  
T. J. O'BRIEN, Grand Rapids, Mich.  
J. H. P. HUGHART, Grand Rapids, Mich.  
R. R. METHEANY, Grand Rapids, Mich.  
L. N. KEATING, Muskegon, Mich.  
N. MCGRAFT, Muskegon, Mich.

Term expires, March 1, 1898.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When articles of association filed: February 12, 1886.  
Number of stockholders at date of last election: 8.  
Number of stockholders at same date, in Michigan: 8.  
Amount of full paid stock held in Michigan at same date. \$1,000.00.  
Date of annual meeting of stockholders: First Wednesday in March.  
Fiscal year of company ends December 31.  
General offices of the company are located at Grand Rapids, Mich.

REMARKS.

Operated by the Grand Rapids & Indiana Railway Company.  
Terms: Net earnings.

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$350,000 00
Par value of shares.....	\$100	
No. of shares issued.....	200	
Amount paid in on common.....	\$1,000 00	
 Total amount paid in, as per books of the company.....		 1,000 00
 Paid in per mile of road owned by company.....		 27 14

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage, June 9, 1886.....	5%	July 1, 1926.....	New York.....	\$750,000 00

These bonds were issued by the Grand Rapids & Indiana Railroad Company, and were secured by a first mortgage on the railroad and property of the Muskegon, Grand Rapids & Indiana Railroad.

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For miscellaneous.....	Coupons to be paid.....	\$99,075 00

## ANALYSIS OF DEBT ACCOUNTS.

## RECAPITULATION.

Total funded debt.....	\$750,000 00
Total unfunded debt.....	99,075 00
Total debt liabilities.....	\$849,075 00
Amount of debt liabilities per mile of road, 36.85 miles.....	28,041 44
Total amount of stock and debt.....	850,075 00
Stock and debt per mile of road.....	23,068 52

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year.....	\$37,500 00
If interest is in default state the years and amounts as follows:	
Six months interest due January 1, 1896. (Paid February 1, 1897).....	18,750 00
Six months interest due July 1, 1895.....	18,750 00
Six months interest due January 1, 1896.....	18,750 00
Six months interest due July 1, 1896.....	18,750 00
Six months interest due January 1, 1897.....	18,750 00

## COST OF ROAD AND EQUIPMENT.

## TOTAL COST FOR CONSTRUCTION AND EQUIPMENT OF ROAD, AND BRANCHES BUILT BY COMPANY.

Total expended for construction.....	\$746,978 21
Average cost of construction per mile of road (not including sidings), 36.85 miles.....	20,270 78
Proportion of cost of construction for Michigan.....	746,978 21

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
December 1, 1886.

## MAIN LINE.

	Miles.	Miles.
Length completed in Michigan.....	36.85	
Total length completed.....		36.85
Total length of road belonging to this company.....		36.85
Total length of road belonging to this company in Michigan.....	36.85	
Aggregate length of sidings, spurs, and other tracks not above enumerated.....		8.12
Same in Michigan.....	8.12	
Aggregate length of tracks belonging to this company, computed as single track.....		44.97
Same in Michigan.....	44.97	

Gauge of track: 4 feet 9 inches.



ANNUAL REPORT  
OF THE  
TRAVERSE CITY RAILROAD COMPANY,

*For the year ending March 31, 1896.*

[Filed May 1, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, PERRY HANNAH, Traverse City, Mich.  
*Secretary*, R. R. METHEANY, Grand Rapids, Mich.  
*Treasurer*, W. R. SHELBY, Grand Rapids, Mich.  
*Transfer Agent* R. R. METHEANY, Grand Rapids, Mich.

DIRECTORS.

PERRY HANNAH, Traverse City, Mich.  
W. H. C. MITCHELL, Traverse City, Mich.  
THOS. T. BATES, Traverse City, Mich.  
D. C. LEACH, Traverse City, Mich.  
W. O. HUGHART, Grand Rapids, Mich.  
W. R. SHELBY, Grand Rapids, Mich.  
J. H. P. HUGHART, Grand Rapids, Mich.

Term expires May 6, 1897.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: October 30, 1871.  
Number of stockholders at date of last election: 73.  
Number of stockholders in Michigan at same date: 72.  
Amount of full paid stock held in Michigan at same date: \$35,400.00  
Date of annual meeting of stockholders: Thursday after first Wednesday in May.  
Fiscal year of company ends December 31.  
General offices of the company are located at Traverse City, Mich.

REMARKS.

Operated by Grand Rapids & Indiana Railway Co. Terms: net earnings.

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association .....		\$205,000 00
Par value of shares .....	\$100 00	
Average price received per share .....	100 00	
Number of shares issued .....	2,050	
Amount paid in on common .....	205,000 00	
Total amount paid in, as per books of the company .....		\$205,000 00
Paid in per mile of road owned by company .....		7,884 63

## MICHIGAN RAILROAD RETURNS, 1896.

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage, January 1, 1883.....	3% not to exceed 5%	January 1, 1883.	New York.....	\$250,000 00
Income mortgage, January 1, 1883.....		January 1, 1883.	New York.....	190,000 00
Total funded debt.....				\$440,000 00

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated.	Amount.
For miscellaneous.....	Coupons—to be paid.....	\$11,430 00
For current balances.....		623 63
Total unfunded debt .....		\$12,053 63

## RECAPITULATION.

Total funded debt .....	\$440,000 00
Total unfunded debt .....	12,053 63
Total debt liabilities.....	\$452,053 63
Amount of debt liabilities per mile of road .....	17,886 63
Total amount of stock and debt.....	657,053 63
Stock and debt per mile of road .....	25,271 30

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year .....	\$7,500 00
Was it paid for the last year? No.	
If interest is in default state the years and amounts as follows:	
Six months' interest due January 1, 1896 (paid February 1, 1897) .....	\$3,750 00
Six months' interest due July 1, 1896.....	3,750 00
Six months' interest due January 1, 1897.....	3,750 00

## COST OF ROAD AND EQUIPMENT.

Total cost for construction and equipment of road and branches built by company.

Total expended for construction.....	\$646,268 15
Average cost of construction per mile of road (not including sidings) 26 miles .....	24,856 47
Proportion of cost of construction for Michigan.....	646,268 15

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
December 1, 1872.

## MAIN LINE.

	Miles.
Length completed in Michigan .....	26.00
Total length of road belonging to this company in Michigan.....	26.00
Aggregate length of sidings, spurs, and other tracks not above enumerated .....	4.32
Aggregate length of tracks belonging to this company, computed as single track.....	30.32

Gauge of track, 4 feet 9 inches.

ANNUAL REPORT  
OF THE  
HANCOCK & CALUMET RAILROAD COMPANY.

*For the year ending December 31, 1896.*

[Filed April 5, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, A. B. ELDRIDGE, Marquette, Mich.  
*Vice President*, J. M. WILKINSON, Marquette, Mich.  
*Secretary*, A. E. MILLER, Marquette, Mich.  
*Auditor*, A. E. DELF, Marquette, Mich.  
*Treasurer*, E. W. ALLEN, Marquette, Mich.  
*Assistant Treasurer and Assistant Secretary*:  
 GEO. H. CHURCH, New York, N. Y.  
*General Manager*, WM. F. FITCH, Marquette, Mich.  
*Superintendent*, J. C. SHIELDS, Hancock, Mich.  
*General Passenger Agent*, GEO. W. HIBBARD, Marquette, Mich.  
*General Freight Agent*, WM. ORR, Duluth, Minn.  
*Attorney*, A. B. ELDRIDGE, Marquette, Mich.

DIRECTORS.

C. H. CALL, Marquette, Mich.  
 A. B. ELDRIDGE, Marquette, Mich.  
 A. E. MILLER, Marquette, Mich.  
 J. M. WILKINSON, Marquette, Mich.  
 A. S. BIGELOW, Boston, Mass.  
 W. E. PARNALL, Larnim, Mich.  
 Term expires July 14, 1897.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: January 14, 1885.  
 Number of stockholders at date of last election: 12.  
 Number of stockholders in Michigan at same date: 10.  
 Amount of full paid stock held in Michigan at same date: 1,006 shares.  
 Date of annual meeting of stockholders: Second Tuesday in July.  
 Fiscal year of company ends: December 31.  
 General offices of the company are located at Marquette, Mich.

GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$178,088 43
Total expenses, including taxes.....	\$112,099 99	
Net income.....		\$65,988 44
Interest on funded debt.....	\$16,250 00	
Balance applicable to dividends.....		\$49,738 44
Dividends declared (5 per cent).....	\$17,500 00	
Balance for the year.....		\$32,238 44
Balance (profit and loss) last year.....		280,114 47
Balance forward to next year.....		\$292,352 91

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$350,000 00
Par value of shares.....	\$100 00	
Number of shares issued.....	3,500	
Amount paid in on common.....	350,000 00	
Total amount paid in, as per books of the company.....		350,000 00
Paid in per mile of road owned by company, 31.19 miles.....		11,221 55

## FUNDED DEBT.

Class, character and date of issue	Rate of interest.	When due.	Where payable.	Amount outstanding.
H. & C. R. R. Consol mortgage, Jan. 1, 1891.	5%	Jan. 1, 1931.....	In New York, N. Y.	*\$400,000 00
Total funded debt.....				\$400,000 00

\* Of the \$400,000.00 5% bonds \$75,000.00 are in the treasury of the company.

## RECAPITULATION.

Total funded debt.....	\$400,000 00
Total debt liabilities.....	\$400,000 00
Amount of debt liabilities per mile of road, 31.19 miles.....	12,824 62
Total amount of stock and debt.....	750,000 00
Stock and debt per mile of road, 31.19 miles.....	24,046 17

## GENERAL BALANCE SHEET.—Dr.

Construction account.....	\$703,062 80
Equipment account.....	167,372 94
Other investments.....	75,000 00
Hancock & Calumet R. R. 5% bonds.....	\$75,000 00
Other assets.....	96,917 17
Debit balances from companies and individuals.....	\$96,917 17
Total.....	\$1,042,352 91

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$350,000 00
Funded debt.....	400,000 00
Profit and loss or income accounts.....	292,352 91
Total.....	\$1,042,352 91

## COST OF ROAD AND EQUIPMENT.

Total cost for construction and equipment of road and branches built by company.

Total expended for construction and equipment.....	\$870,435 74
Average cost per mile of road (not including sidings), 31.19 miles.....	27,907 53
Proportion of cost for Michigan.....	870,435 74

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

	Extensions and new sidings.	New fences.	New locomotives.	New cars.	Total.
Main line .....	\$1,936 29	\$116 60	\$296 87	\$11,685 05	\$14,034 81
BRANCHES.					
Dollar Bay Dock .....	6,527 87				6,527 87
Total charges.....	\$8,464 16	\$116 60	\$296 87	\$11,685 05	20,562 68

Total charges to property account as above.....	\$20,562 68
Net addition to property account .....	20,562 68

## PASSENGER EARNINGS.

Main line and branches:	
Local fares .....	\$11,809 90
Total passenger fares.....	\$11,809 90
Express and baggage.....	338 89
Mails .....	669 01
Total passenger department earnings .....	\$12,812 80
Per train mile .....	\$0 48.92
Per mile of road .....	407 79

## FREIGHT EARNINGS.

Main line and branches:	
Local traffic.....	\$164,818 13
Total traffic.....	\$164,818 13
Total freight department earnings .....	164,818 13
Per train mile .....	\$1 04.87
Per mile of road .....	5,245 64
Total transportation earnings, entire lines.....	\$177,630 93
Transportation earnings per mile of road.....	\$5,653 44
Transportation earnings per train mile.....	96.88
For rents not otherwise provided for.....	457 50

Distribution of miscellaneous earnings between main line and leased or proprietary roads:

	Total mis- cellaneous.	Proportion for Michigan.
Hancock & Calumet R. R. ....	\$457 50	\$457 50
Total earnings from operation of road .....		\$178,088 43
Total earnings per mile of road .....	\$5,668 00	
Total earnings per train mile .....	97.13	
Proportion of taxable earnings for Michigan .....		178,088 43
Total taxable earnings per mile of road in Michigan.....		5,668 00
Total income from all sources .....		\$178,088 43
Proportion of income for Michigan .....		178,088 43

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway.....	\$15,280 84
Renewals of ties.....	1,096 98
Repairs and renewals of bridges and culverts.....	897 35
Repairs and renewals of fences, road crossings, signs and cattle guards.....	80 08
Repairs and renewals of buildings and fixtures.....	622 08
Repairs and renewals of telegraph.....	85 64
Stationery and printing.....	1 37
<b>Total.....</b>	<b>\$17,564 22</b>

## MAINTENANCE OF EQUIPMENT.

Superintendence.....	\$1,200 00
Repairs and renewals of locomotives.....	5,319 75
Repairs and renewals of passenger cars.....	1,320 84
Repairs and renewals of freight cars.....	8,486 98
Other expenses.....	74 50
<b>Total.....</b>	<b>\$16,242 02</b>

## CONDUCTING TRANSPORTATION.

Superintendence.....	\$1,416 56
Engine and roundhouse men.....	16,229 53
Fuel for locomotives.....	16,281 37
Water supply for locomotives.....	776 68
Oil, tallow and waste for locomotives.....	483 22
Other supplies for locomotives.....	106 17
Train service.....	15,298 10
Train supplies and expenses.....	374 62
Switchmen, flagmen and watchmen.....	3,898 64
Telegraph expenses.....	1,797 09
Station service.....	8,480 04
Station supplies.....	678 17
Loss and damage.....	59 78
Injuries to persons.....	45 00
Advertising.....	40 87
Rent of buildings and other property.....	900 00
Stationery and printing.....	425 71
<b>Total.....</b>	<b>\$67,061 00</b>

## GENERAL EXPENSES.

Salaries of general officers.....	\$3,150 00
Salaries of clerks and attendants.....	2,044 20
General office expenses and supplies.....	116 63
Insurance.....	367 60
Law expenses.....	491 29
Stationery and printing (general offices).....	91 17
Other expenses.....	182 07
Taxes.....	4,789 79
<b>Total.....</b>	<b>\$11,232 75</b>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	15.67	\$17,564 22
Maintenance of equipment.....	14.49	16,242 02
Conducting transportation.....	59.82	67,061 00
General expenses, including taxes.....	10.02	11,232 75
<b>Total operating expenses and taxes.....</b>	<b>100.00</b>	<b>\$112,099 99</b>
Operating expenses and taxes per mile of road.....		\$3,567 79
Operating expenses and taxes per train mile run, for trains, earning revenue, 183,359 miles.....		61.14
Proportion of operating expenses and taxes for Michigan, main line.....		112,099 99
<b>Total proportion of expenses for Michigan.....</b>		<b>\$112,099 99</b>
Percentage of expenses to earnings.....	62.95	
Net earnings per mile of road.....		2,100 20
Net earnings per train mile.....		35.99

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Hancock to Calumet, December 1, 1885.  
 From Junction to Lake Linden, December 1, 1885.  
 From Calumet to Allouez, March 12, 1887.  
 From Allouez to Fulton, October 28, 1891.  
 From Fulton to end of track, July 28, 1895.

MAIN LINE.		Miles.	Miles.
In Michigan, from Hancock to end of track .....			24.00
Total length completed .....			24.00

BRANCHES.			
Lake Linden from Junction to Lake Linden .....	2.51		
North Tamarack from Tamarack mine to North Tamarack mine .....	1.87		
Tamarack, Jr., from main line to Tamarack, Jr., mine .....	.66		
Kearsarge from main line to Kearsarge mine .....	.65		
Dollar Bay from main line to Dollar Bay Dock .....	.75		
Union Coal Dock from main line to Union Coal Dock, Dollar Bay .....	.75		
Total length of branches owned by company .....		7.19	
Total length of branches owned by company in Michigan .....	7.19		
Total length of road belonging to this company .....			31.19
Total length of road belonging to this company in Michigan .....	31.19		
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated .....			11.75
Aggregate length of tracks in Michigan belonging to this company, computed as single track .....			42.94

Gauge of track, 3 feet.

*Proprietary or leased roads operated by this company.*

Name, description and length of each:	Total miles.	In Michigan.
Mineral Range R. R., from passenger depot at Hancock to H. & C. R. R. connection at smelting works .....	.23	.23
Total .....	.23	.23
Total miles operated by the company .....	31.42	31.42

*Number of bridges and trestles in Michigan.*

	Number.	Aggregate length, feet.
Wooden bridges .....	16	2,291½
Iron bridges .....	3	562
Wooden trestles .....	5	1,178
Total .....	24	4,031½

*Crossings.—Railroad and highway.*

What railroads cross your road at grade in this State, and at what locality?

Mineral range R. R. at Osceola.  
 Hecla & Torch Lake R. R. at Calumet.

What railroads cross your road either over or under your grade in this State, and where?

Over.  
 Hecla & Torch Lake R. R. at Calumet.

At what crossings are interlocking and derailing switches in operation?

Osceola.

What pattern or patterns have you adopted?

Pennsylvania Steel Co.

Number of crossings of highways at grade in this State .....	12
Number of crossings of highways over or under railroad .....	1
Number of highway bridges, 18 feet above track .....	1

Have safety guards been erected at overhead obstructions?  
 Yes.

Are your frogs and guard rails blocked as required by act 174, session laws of 1883?  
 Yes.

How are they treated?  
 Filled in with wooden blocks.

*Stations.*

Number of stations on whole lines.....	6
Same in Michigan.....	6

*Employés.*

Number of persons regularly employed on all roads operated by company, including officials.....	91
Same in Michigan.....	91
Classify your employés as per following list:	Number.
Brakemen.....	12
Conductors.....	6
Engineers.....	7
Firemen.....	6
Laborers.....	25
Shopmen.....	6
Yardmen.....	4
Others.....	25

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you?.....	22.80
Give the number of miles required to complete fence both side of your track in Michigan, and the counties in which needed:	
Houghton county.....	35.22
Keewenaw county.....	4.36
Total miles required.....	39.58

*Road bed and track.*

Number of track sections in Michigan.....	7
Average length of sections (miles).....	4½
Average number of men in each section gang.....	4
Number of new ties put in whole line during the year.....	5,886
Number of new ties put in track in Michigan.....	5,886
Average number of new ties per mile of road.....	189

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender.....	7	\$49,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender.....	1	5,000 00
Total.....	8	\$54,000 00
Number of passenger cars—8-wheel, including official cars.....	4	\$12,000 00
Number of box freight cars.....	16	4,800 00
Number of platform cars.....	99	24,750 00
Number of ore cars.....	166	62,250 00
Number of conductors' way cars.....	3	1,500 00
Other cars as follows: (Snow plow).....	1	200 00
Total.....	289	\$159,500 00

Number of locomotives equipped with power brakes.....	7
Number of passenger train cars equipped with power brakes.....	4
What patterns of power brakes have you in use, and number of locomotives and cars with each?	
Locomotives, Westinghouse air brake, 1; locomotive, American Brake Co., vacuum brake, 6; passenger cars, Westinghouse air brake, 4.	
Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 82, session laws of 1887?	
Yes.	
What pattern or patterns have you adopted for use?	
Janney.	
How are your passenger cars heated.	
Baker hot water heater.	

## MILEAGE TRAFFIC, ETC.

*Train mileage.*

	In Michigan.
Miles run by passenger trains during the year.....	26,190
Miles run by freight trains during the year.....	157,169
Total mileage of trains earning revenue.....	183,359



*Passenger traffic.—Road all in State of Michigan.*

	Numbers.	Miles.	Rate.
Number of local passengers carried, earning revenue.....	60,619		
Number of passengers carried one mile.....	378,266		
Average distance carried.....		6.157	
Average amount received from each passenger.....			\$0 19.482
Average receipts per mile for local passengers.....			08.168

*Freight traffic.—Road all in State of Michigan.*

	Tons.	Miles.	Rate
Number of tons of local freight carried, earning revenue.....	1,118,980		
Total mileage of local freight.....		6,517,866	
Total freight mileage or tons carried one mile.....		6,517,866	
Average ton haul for local freight.....		5.824	
Average ton haul for all freight.....		5.824	
Average amount received for each ton haul.....			\$0 14.729
Average receipts ton per mile for local freight.....			02.528
Average receipts ton per mile for all freight.....			02.528

FREIGHT TRAFFIC MOVEMENT.—ROAD ALL IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	1,099		1,099	.10
Flour.....	473		473	.04
Other mill products.....	669		669	.06
Hay.....	253		253	.02
Fruit and vegetables.....	192		192	.02
<b>Products of animals:</b>				
Live stock.....	8		8	
Dressed meats.....	23		23	
<b>Products of mines:</b>				
Bituminous coal.....	53,585		53,585	4.79
Ores, copper rock.....	822,924		822,924	73.54
Stone, sand, and other like articles.....	5,977		5,977	.54
<b>Products of forest:</b>				
Lumber.....	14,091		14,091	1.26
Logs.....	11,189		11,189	1.00
<b>Manufactures:</b>				
Iron, pig and bloom.....	435		435	.04
Iron and steel rails.....	729		729	.06
Other castings and machinery.....	1,516		1,516	.14
Bar and sheet metal.....	56		56	.01
Cement, brick and lime.....	843		843	.07
Wagons, carriages, tools, etc.....	127		127	.01
Wines, liquors and beers.....	874		874	.08
<b>Merchandise.....</b>	<b>7,665</b>		<b>7,665</b>	<b>.68</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	196,252		196,252	17.54
<b>Total tonnage.....</b>	<b>1,118,980</b>		<b>1,118,980</b>	<b>100.00</b>

ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

Western Express Co. Hancock & Calumet R. R. receives \$20 00 per month. They do a general business. We take their freight at our depots.

## Telegraph.

Number of miles of telegraph on your road, and to whom does it belong?  
10 miles; owned by Mineral Range R. R. Co.

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR, 1896.

## INJURED.

January 8, P. McCarthy, brakeman, Hancock. Slightly scalded by escaping steam from engine.  
January 20, T. Rentenbach, brakeman, Hancock. Finger pinched; coupling.  
April 18, Israel Pilky, Red Jacket. Flesh torn off finger; coupling.  
May 27, Geo. Harris, brakeman, Osceola. Finger pinched; coupling.  
November 25, John Hohner, brakeman, Mills. Right hip bruised; coupling.  
December 8, Richard O'Neal, trespasser, Calumet. Lying on track; struck by train; intoxicated.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Coupling cars.....					4	
Miscellaneous.....					1	
Trespassers on tracks.....						1
Total.....					5	1

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons injured during the year.....	6
Number of casualties purely accidental.....	5
Persons killed or injured while intoxicated.....	1
Trespassers and tramps killed or injured.....	1

## CLASSIFICATION OF EMPLOYÉS.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Brakemen.....		5	5
Total.....		5	5

STATE OF MICHIGAN, }  
COUNTY OF MARQUETTE, } ss.

A. E. Delf, auditor of the Hancock & Calumet Railroad Company, being duly sworn deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declares them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of his knowledge and belief.

[L. S. of R. R.]

Signed,

A. E. DELF, Auditor.

Subscribed and sworn to before me this 1st day of April, A. D. 1897.

[L. S.]

CHARLES A. PAYNE.

# ANNUAL REPORT

## OF THE

# INDIANA & LAKE MICHIGAN RAILWAY COMPANY,

*For the year ending December 31, 1896.*

[Filed March 30, 1897.]

### OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, J. J. TURNER, St. Louis, Mo.  
*Secretary*, GEORGE E. FARRINGTON, Terre Haute, Ind.  
*Treasurer*, R. B. THOMPSON, Terre Haute, Ind.  
*Transfer Agent*, GEORGE E. FARRINGTON, Terre Haute, Ind.  
*Vice President*, JAMES MCGEEA, Pittsburgh, Pa.  
*Assistant Secretary*, W. G. PHELPS, St. Louis, Mo.

### DIRECTORS.

J. J. TURNER, St. Louis, Mo.  
 JAMES MCGEEA, Pittsburgh, Pa.  
 JNO. E. DAVIDSON, Pittsburgh, Pa.  
 W. R. MCKEEN, Terre Haute, Ind.  
 GEO. E. FARRINGTON, Terre Haute, Ind.  
 Terms expire January 13, 1898.

### STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: March 30, 1888.  
 Number of stockholders at date of last election: 6.  
 Number of stockholders in Michigan at same date: None.  
 Amount of full paid stock held in Michigan at same date: None.  
 Date of annual meeting of stockholders: First Wednesday after second Tuesday in January.  
 Fiscal year of company ends October 31st.  
 General offices of the company are located at Terre Haute, Ind.

### REMARKS.

Indiana & Lake Michigan Ry. Co., of Indiana, chartered July 2, 1887; Indiana & Lake Michigan Ry. Co., of Michigan, chartered August 3, 1887, under the laws of each State. These two companies were consolidated March 30, 1888, as the Indiana & Lake Michigan Ry. Co., whose property and franchises was leased January 6, 1890, to the Terre Haute & Indianapolis R. R. Co. for 99 years, lessee guaranteeing \$180,000.00, first mortgage, 3½ bonds, retaining 75% of gross earnings for operating, and applying 25% of gross earnings to payment of taxes, interest on bonds, and expense of maintaining corporate organization, any surplus derived from the 25% to be paid to lessor. The lessee is the owner of the stock of this company. Interest due September 1, 1896, on first mortgage bonds is in default. Lessee failing to meet guarantee, lessee's property was placed in hands of receiver, November 13, 1896, and this property by virtue of lease is now in his control.

### ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$800,000 00
Par value of shares.....	\$100 00	
Average price received per share .....	100 00	
Number of shares issued.....	8,000	
Amount paid in on common.....		\$800,000 00
Total amount paid in, as per books of the company.....		800,000 00
Paid in per mile of road owned by company .....		\$20,361 41

## MICHIGAN RAILROAD RETURNS, 1896.

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage, Sept. 1, 1889.....	5%	Mar. and Sept.	Cent. Trust Co., New York.....	\$480,000 00

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated.	Amount.
For construction.....	To be liquidated out of surplus income from lease.....	\$201,218 49
For miscellaneous.....	To be liquidated out of surplus income from lease.....	58,674 88
For current balances.....	Interest in default.....	12,000 00
Total unfunded debt.....		\$271,893 37

## RECAPITULATION.

Total funded debt.....	\$480,000 00
Total unfunded debt.....	271,893 37
Total debt liabilities.....	\$751,893 37
Amount of debt liabilities per mile of road, 39.29 miles.....	19,137 01
Total amount of stock and debt.....	1,551,893 37
Stock and debt per mile of road.....	39,496 42

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year.....	\$24,000 00
Was it paid for the last year? Only one-half paid.	
If interest is in default state the years and amounts as follows:	
Interest due September 1, 1896, in default.....	12,000 00

## COST OF ROAD AND EQUIPMENT.

## TOTAL COST FOR CONSTRUCTION AND EQUIPMENT OF ROAD AND BRANCHES BUILT BY COMPANY.

Total expended for construction.....	\$1,431,088 44
Average cost of construction per mile of road (not including sidings) 39.29 miles.....	86,422 46
Proportion of cost of construction for Michigan.....	908,709 41

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini: August 15, 1890.

## MAIN LINE.

	Miles.	Miles.
Length completed in Michigan.....	25.05	
In other states.....	14.24	
Total length completed.....		39.29

## BRANCHES.

Aggregate length of sidings, spurs and other tracks not above enumerated...	6.23	
Same in Michigan.....	4.53	
Aggregate length of tracks belonging to this company, computed as single track.....		45.49
Same in Michigan.....	29.53	
Gauge of track, 4 feet 9 inches.		

STATE OF MISSOURI, } ss.  
CITY OF ST. LOUIS, }

J. J. Turner, president, and W. G. Phelps, assistant secretary, of the Indiana & Lake Michigan Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the stock, debt and other matters therein contained of said company, on the thirty-first day of December, A. D. 1897, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

J. J. TURNER, *President*,

W. G. PHELPS, *Assistant Secretary*.

Subscribed and sworn to before me this 23rd day of March, A. D. 1897.

[L. S.]

F. A. BANISTER,  
*Notary Public*.

# ANNUAL REPORT OF THE TERRE HAUTE & INDIANAPOLIS RAILROAD COMPANY.

LESSER

## INDIANA AND LAKE MICHIGAN RAILWAY.

*For the year ending December 31, 1896.*

[Filed April 2, 1897.]

### OFFICERS OF TERRE HAUTE AND INDIANAPOLIS RAILROAD COMPANY, WITH LOCATION OF OFFICES.

*President, JAMES MCCREA, Pittsburg, Pa.*  
*Vice President and General Manager, J. J. TURNER, St. Louis, Mo.*  
*Secretary, GEO. E. FARRINGTON, Terre Haute, Ind.*  
*Auditor, W. S. RONEY, Terre Haute, Ind.*  
*Treasurer, R. B. THOMPSON, Terre Haute, Ind.*  
*Division Superintendent, F. T. HATCH, Terre Haute, Ind.*  
*Chief Engineer, F. T. HATCH, Terre Haute, Ind.*  
*Superintendent of Telegraph, A. M. SCHOYER, Pittsburg, Pa.*  
*General Passenger Agent, E. A. FORD, Pittsburg, Pa.*  
*General Freight Agent, N. W. TAYLOR, St. Louis, Mo.*  
*Attorney, JNO. G. WILLIAMS, Indianapolis, Ind.*  
*Receiver, V. T. MALOTT, Indianapolis, Ind.*

### STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: March 30, 1888.  
 Number of stockholders at date of last election: 5.  
 Date of annual meeting of stockholders: Second Wednesday in December.  
 Fiscal year of company ends October 31.  
 General offices of the company are located at Terre Haute, Ind.

### ANALYSIS OF EARNINGS.—IN STATE OF MICHIGAN.

PASSENGER EARNINGS.		
Main line and branches:		
Local fares .....	\$10,352 28	
Through fares .....	1,741 51	
Total passenger fares .....	\$12,093 79	
Express and baggage .....	566 78	
Mails .....	1,690 36	
Total passenger department earnings .....		\$14,350 93
Per train mile .....	\$0 38	
Per mile of road .....	572 89	
FREIGHT EARNINGS.		
Main line and branches:		
Local traffic .....	\$8,102 51	
Through traffic .....	20,835 04	
Total freight department earnings .....		28,937 55
Per train mile .....	\$1 36	
Per mile of road .....	1,155 19	

# TERRE HAUTE & INDIANAPOLIS RAILROAD COMPANY. 269

## ANALYSIS OF EARNINGS.—ENTIRE LINES.

PASSENGER EARNINGS.		
Main line and branches:		
Local fares .....	\$14,460 41	
Through fares .....	2,419 95	
Total passenger fares .....	\$16,880 36	
Express and baggage .....	615 25	
Mails .....	2,857 74	
Total passenger department earnings .....		\$20,353 35
Per train mile .....	\$0 84	
Per mile of road .....	515 08	
FREIGHT EARNINGS.		
Main line and branches:		
Local traffic .....	\$12,112 31	
Through traffic .....	35,508 45	
Total freight department earnings .....		46,616 76
Per train mile .....	\$1 40	
Per mile of road .....	1,185 48	
Total transportation earnings, entire line .....		\$66,970 11
Transportation earnings per mile of road .....	\$1,704 51	
Transportation earnings per train mile .....	72	
Total earnings from operation of road .....		66,970 11
Total earnings per mile of road .....	\$1,704 51	
Total earnings per train mile .....	72	
Proportion of taxable earnings for Michigan .....	43,288 48	
Total taxable earnings per mile of road in Michigan .....	1,725 08	
Total income from all sources .....		\$66,970 11
Proportion of income for Michigan .....		43,288 48

## ANALYSIS OF EXPENSES.

MAINTENANCE OF WAY AND STRUCTURES.	
Repairs of roadway .....	\$9,084 50
Renewals of rails .....	599 08
Renewals of ties .....	3,188 54
Repairs and renewals of bridges and culverts .....	208 57
Repairs and renewals of fences, road crossings, signs and cattle guards .....	1,082 71
Repairs and renewals of buildings and fixtures .....	508 84
Repairs and renewals of docks and wharves .....	335 95
Repairs and renewals of telegraph .....	97 84
Stationery and printing .....	36 87
Other expenses .....	1,008 43
Total .....	\$16,064 42
MAINTENANCE OF EQUIPMENT.	
Superintendence .....	\$265 28
Repairs and renewals of locomotives .....	1,021 30
Repairs and renewals of passenger cars .....	162 18
Repairs and renewals of freight cars .....	3,775 19
Repairs and renewals of work cars .....	209 82
Repairs and renewals of shop machinery and tools .....	34 92
Stationery and printing .....	6 22
Other expenses .....	163 90
Total .....	\$5,638 76
CONDUCTING TRANSPORTATION.	
Superintendence .....	\$599 81
Engine and roundhouse men .....	8,317 27
Fuel for locomotives .....	4,172 05
Water supply for locomotives .....	612 73
Oil, tallow and waste for locomotives .....	114 08
Other supplies for locomotives .....	84 05
Train service .....	5,423 53
Train supplies and expenses .....	631 22

Switchmen, flagmen and watchmen .....	\$2,937 49
Telegraph expenses .....	1,701 07
Station service .....	9,056 48
Station supplies .....	968 90
Car mileage—balance .....	6,850 32
Hire of equipment .....	3,232 33
Loss and damage .....	234 86
Injuries to persons .....	40 84
Clearing wrecks .....	1 35
Advertising .....	85 53
Outside agencies .....	2,067 00
Rents for tracks, yards and terminals .....	2,425 15
Rent of buildings and other property .....	1,394 43
Stationery and printing .....	608 16
Other expenses .....	6 26
<b>Total .....</b>	<b>\$51,188 02</b>

## GENERAL EXPENSES.

Salaries of general officers .....	\$415 64
Salaries of clerks and attendants .....	691 71
General office expenses and supplies .....	45 41
Law expenses .....	191 04
Stationery and printing (general offices) .....	32 16
Other expenses .....	77
<b>Total .....</b>	<b>\$1,426 73</b>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures .....	21.60	\$16,054 42
Maintenance of equipment .....	7.59	5,638 76
Conducting transportation .....	68.89	51,188 02
General expenses, including taxes .....	1.92	1,426 73
<b>Total operating expenses and taxes .....</b>	<b>100.00</b>	<b>\$74,307 98</b>
Operating expenses and taxes per mile of road .....		\$1,391 27
Operating expenses and taxes per train mile run, for trains, earning revenue, 92,546 miles .....		80
<b>Total proportion of expenses for Michigan .....</b>		<b>\$47,376 27</b>
Percentage of expenses to earnings, .....	111	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From South Bend, Ind., to St. Joseph, Mich., Aug. 4, 1890.

## MAIN LINE.

	Miles.	Miles.
In Michigan, from Indiana State Line to St. Joseph, Mich. ....	25.05	
In Indiana, from Michigan State Line to South Bend, Ind. ....	14.24	
<b>Total length completed .....</b>		<b>39.29</b>
Total length of road belonging to this company in Michigan .....	25.05	
Aggregate length in Michigan of sidings, spurs and other tracks not above enumerated .....	5.51	
<b>Aggregate length of tracks in Michigan belonging to this company, computed as single track .....</b>		<b>30.56</b>
Gauge of track, 4 feet 8½ inches.		

## Number of bridges and trestles in Michigan.

	Number.	Aggregate length, feet.
Wooden trestles .....	23	1,905



# TERRE HAUTE & INDIANAPOLIS RAILROAD COMPANY. 271

## Crossings.—Railroad and highway.

What railroads cross your road either over or under your grade, in this State, and where?  
Over: Michigan Central Railroad at Gallen.

Number of crossings of highways at grade in this State..... 24  
Number of crossings of highways at grade in this State at which there are gates or flagmen..... 2

Number of crossings of highways over or under railroad:  
Over 4.

Number of highway bridges 18 feet above track:  
Four.

Have safety guards been erected at overhead obstructions?  
At M. C. crossing.

Are your frogs and guard rails blocked as required by act 174, session laws of 1883?  
Not all.

How are they treated?  
Wooden blocking placed between the rails.

## Stations.

Number of stations on whole lines..... 10  
Same in Michigan..... 6

## Employees.

Number of persons regularly employed on all roads operated by company, including officials..... 61  
Same in Michigan..... 54

Classify your employée as per following list:

	Number.
Baggagemen.....	2
Brakemen.....	4
Conductors.....	3
Engineers.....	4
Firemen.....	4
Laborers.....	14
Shopmen.....	8
Yardmen.....	5
Others.....	10

## REPAIRS AND RENEWALS.

### Fencing in Michigan.

How many miles of fencing have you?..... 45.05  
Give the number of miles required to complete fences both side of your track in Michigan, and the counties in which needed: In Berrien county..... 5.05  
Total miles required: 50.10.

### Road bed and track.

Number of track sections in Michigan..... 4  
Average lengths of sections, miles..... 6  
Average number of men in each section gang..... 3  
Number of new ties put in whole line during the year..... 7,325  
Number of new ties put in track in Michigan..... 4,650  
Average number of new ties per mile of road,..... 186

### Bridges and culverts.

Amount of trestle work replaced with earth during the year, liner feet..... 16  
With sewer pipe..... 1

## MILEAGE, TRAFFIC, ETC.

### Train mileage.

	Entire lines.	In Michigan.
Miles run by passenger trains during the year.....	59,260	37,776
Miles run by freight trains during the year.....	33,236	21,217
Total mileage of trains earning revenue.....	92,546	58,993

*Passenger traffic.—Entire lines.*

	Numbers.	Miles.	Rate.
Number of through passengers carried, earning revenue.....	2,975		
Number of local passengers carried, earning revenue.....	29,568		
Total number of passengers carried, earning revenue.....	32,543		
Number of passengers carried one mile.....	802,832		
Average distance carried.....		25	
Average amount received from each passenger.....			\$0 52
Average receipts per mile for through passengers.....			02.
Average receipts per mile for local passengers.....			02.1
Average receipts per passenger per mile for all passengers.....			02.1
Estimated cost of carrying each passenger one mile.....			04.8

*Passenger traffic.—In State of Michigan.*

	Numbers.	Miles.	Rate.
Number of through passengers carried, earning revenue.....	1,866		
Number of local passengers carried, earning revenue.....	18,851		
Total number of passengers carried, earning revenue.....	20,717		
Number of passengers carried one mile.....	512,207		
Average distance carried.....		25	
Average amount received from each passenger.....			\$0 53
Average receipts per mile for through passengers.....			02.4
Average receipts per mile for local passengers.....			02.4
Average receipts per passenger per mile for all passengers.....			02.4
Estimated cost of carrying each passenger one mile.....			04.8

*Freight traffic.—Entire lines.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	92,931		
Number of tons of local freight carried, earning revenue.....	31,081		
Total tons of freight carried, earning revenue.....	124,012		
Total mileage of through freight.....		3,275,518	
Total mileage of local freight.....		1,011,514	
Total freight mileage or tons carried one mile.....		4,287,032	
Average ton haul for through freight.....			35.25
Average ton haul for local freight.....			32.54
Average ton haul for all freight.....			34.57
Average amount received for each ton haul.....			\$0 38
Average receipts ton per mile, through freight.....			01.02
Average receipts ton per mile, for local freight.....			01.30
Average receipts tons per mile, all freight.....			1.09
Estimated cost of carrying one ton one mile.....			.89

*Freight traffic.—In State of Michigan.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	59,290		
Number of tons of local freight carried, earning revenue.....	19,830		
Total tons of freight carried, earning revenue.....	79,120		
Total mileage of through freight.....		2,039,630	
Total mileage of local freight.....		645,346	
Total freight mileage or tons carried one mile.....		2,735,026	
Average ton haul for through freight.....			35.25
Average ton haul for local freight.....			32.54
Average ton haul for all freight.....			34.57
Average amount received for each ton haul.....			\$0 37
Average receipts ton per mile, for through freight.....			01.00
Average receipts ton per mile, for local freight.....			01.26
Average receipts ton per mile, for all freight.....			01.06
Estimated cost of carrying one ton one mile.....			.89

TERRE HAUTE & INDIANAPOLIS RAILROAD COMPANY. 273

FREIGHT TRAFFIC MOVEMENT.—ENTIRE LINES.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	161	1,664	1,825	1.47
Flour.....	1,057	31,152	32,209	26.07
Other mill products.....	253	9,520	9,773	7.88
Hay.....	46	432	478	.39
Tobacco.....		93	93	.01
Cotton.....		77	77	.01
Fruit and vegetables.....	9,840		9,840	7.98
Other articles.....	39	780	819	.70
<b>Products of animals:</b>				
Live stock.....	24	112	136	.11
Other packing house products.....		67	67	.01
Poultry, game and fish.....		13	13	
Wool.....	23	74	97	.01
Hides and leather.....		567	567	.50
Other articles.....		26	26	
<b>Products of mines:</b>				
Anthracite coal.....		3,532	3,532	2.85
Bituminous coal.....		10,815	10,815	8.72
Coke.....		42	42	
Stone, sand, and other like articles.....	845	3,305	4,150	3.35
Other articles.....	942	374	1,316	1.06
<b>Products of forest:</b>				
Lumber.....	3,801	13,676	17,477	14.09
Other articles.....	4,626	6,008	10,634	8.57
<b>Manufactures:</b>				
Petroleum and other oils.....	37	101	138	.11
Sugar.....	37	353	390	.30
Iron, pig and bloom.....	227	2,257	2,484	2.00
Iron and steel rails.....		121	121	.10
Other castings and machinery.....	76	623	704	.60
Bar and sheet metals.....	63	110	173	.12
Cement, brick and lime.....	243	250	493	.40
Agricultural implements.....	56	350	406	.30
Wagons, carriages, tools, etc.....	109	353	467	.40
Wines, liquors and beers.....		168	168	.11
Household goods and furniture.....	52	980	1,012	.81
Other articles.....	2,758	2,623	5,386	2.89
<b>Merchandise.....</b>	<b>4,105</b>	<b>2,584</b>	<b>6,689</b>	<b>5.39</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	1,661	1,534	3,195	2.74
<b>Total tonnage.....</b>	<b>31,061</b>	<b>92,981</b>	<b>124,012</b>	<b>100.00</b>

## MICHIGAN RAILROAD RETURNS, 1896.

## FREIGHT TRAFFIC MOVEMENT.—IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	115	1,145	1,260	1.59
Flour.....	900	20,300	21,200	26.79
Other mill products.....	175	6,125	6,300	7.96
Hay.....	79	236	315	.40
Tobacco.....		63	63	.08
Cotton.....		46	46	.06
Fruit and vegetables.....	6,880		6,880	8.07
Other articles.....		519	519	.64
<b>Products of animals:</b>				
Live stock.....		66	66	.08
Other packing house products.....		67	67	.08
Poultry, game and fish.....		13	13	.02
Wool.....		97	97	.13
Hides and leather.....		567	567	.72
Other articles.....		26	26	.03
<b>Products of mines:</b>				
Anthracite coal.....		1,932	1,932	2.44
Bituminous coal.....		6,315	6,315	7.96
Stone, sand and other like articles.....	625	1,875	2,500	3.16
Other articles.....	200	619	819	1.04
<b>Products of forest:</b>				
Lumber.....	2,526	7,581	10,107	12.77
Other articles.....	1,100	5,220	6,320	7.99
<b>Manufactures:</b>				
Iron, pig and bloom.....	130	1,491	1,621	2.05
Iron and steel rails.....		121	121	.15
Other castings and machinery.....	110	330	440	.56
Bar and sheet metal.....		102	102	.13
Cement, brick and lime.....		315	315	.40
Agricultural implements.....		200	200	.25
Wagons, carriages, tools, etc.....		315	315	.40
Wines, liquors and beers.....		100	100	.13
Household goods and furniture.....		625	625	.79
Other articles.....	2,758	828	3,586	4.54
<b>Merchandise.....</b>	<b>4,020</b>	<b>769</b>	<b>4,789</b>	<b>6.05</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	712	1,232	1,994	2.52
<b>Total tonnage.....</b>	<b>19,830</b>	<b>59,290</b>	<b>79,120</b>	<b>100.00</b>

# TERRE HAUTE & INDIANAPOLIS RAILROAD COMPANY, 275

## ADDITIONAL QUESTIONS.

### *Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

Adams Express Co. @ 47½% of gross receipts. The kind of business done is merchandise usually carried by express companies. Freight received at stations.

### *Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

25.1 miles poles owned jointly by I. & L. M. R. R. Co. and Western Union Telegraph Co.

50.2 miles wire owned by I. & L. M. R. R. Co.

23.1 miles wire owned by Western Union Telegraph Co.

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

### KILLED.

October 15, A. W. White, farmer, near Gallien. Attempted to cross road ahead of passenger train.

### INJURED.

June 23, Geo. Broady, brakeman, Glendora. □ Employé; coupling cars.

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year.....	1
Number of persons injured during the year.....	1
Number resulting from lack of caution, carelessness, or misconduct.....	2

## CLASSIFICATION OF EMPLOYÉS.

### KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Brakemen .....		1	1
Total .....		1	1

STATE OF INDIANA, } ss.  
COUNTY OF MARION, }

Volney T. Malott, receiver of the Indiana & Lake Michigan Railway, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declares them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of his knowledge and belief.

[L. S. OF R. R.]

Signed,

VOLNEY T. MALOTT, Receiver.

Subscribed and sworn to before me this 30th day of March, A. D. 1897.

[L. S.]

ARTHUR V. BROWN,  
Notary Public, Marion County, Indiana.

**ANNUAL REPORT**  
**OF THE**  
**IRON RANGE & HURON BAY RAILROAD COMPANY,**

*For the year ending December 31, 1896.*

[Filed March 31, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President*, ALBERT L. STEPHENS, Detroit, Mich.  
*Vice President*, FREMONT WOODRUFF, Detroit, Mich.  
*Secretary*, MARTIN G. BORGMAN, Detroit, Mich.  
*Treasurer*, THEO. D. BUHL, Detroit, Mich.  
*Attorney*, H. E. BOYNTON, Detroit, Mich.

**DIRECTORS.**

ALBERT L. STEPHENS, 1018 Union Trust Building, Detroit.  
 THEO. D. BUHL, Buhl Sons & Co., Detroit.  
 HENRY STEPHENS, Telephone Building, Detroit.  
 WM. H. STEVENS, 44 Moffat Building, Detroit.  
 J. M. THURBER, Buhl Sons & Co., Detroit.  
 FREMONT WOODRUFF, 44 Moffat Building, Detroit.  
 WM. T. DEGRAFF, Detroit National Bank, Detroit.  
 Term expires February, 1898.

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: June 30, 1890.  
 Number of stockholders at date of last election: 10.  
 Number of stockholders in Michigan at same date, 10.  
 Amount of full paid stock held in Michigan at same date: \$814,000  
 Date of annual meeting of stockholders: First Wednesday in February.  
 Fiscal year of company ends: January 31  
 General offices of the company are located at 1018 Union Trust Building, Detroit, Mich.

**REMARKS:**

Road not finished, and was never operated.

**ANALYSIS OF CAPITAL STOCK.**

Amount authorized by charter or articles of association.....		\$1,000,000 00
Par value of shares.....	\$100 00	
Number of shares issued.....	7,640	
Amount paid in on common.....		\$814,000 00
Amount paid in on shares not issued (number) .....	500	
Total amount paid in as per books of the company...	8,140	814,000 00
Paid in per mile of road owned by company, 34 miles .....		23,941 00

ANALYSIS OF DEBT ACCOUNTS.

FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
Mortgage bonds, Nov. 18, 1893 (50 years, semi-annual interest payable in gold, \$1,000 each).....	5%	Jan. 1, 1944.....	New York City...	\$370,000 00
Interest unpaid to January 1, 1897: 321 bonds, \$155.84 each .....				50,024 64
49 bonds, 125.00 each .....				6,125 00
Total funded debt .....				\$426,149 64

UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated.	Amount.
For miscellaneous.....		\$26,264 24

RECAPITULATION.

Total funded debt .....	\$426,149 64
Total unfunded debt .....	26,264 24
Total debt liabilities.....	\$452,413 88
Amount of debt liabilities per mile of road, 34 miles .....	13,306 29
Total amount of stock and debt .....	1,286,413 88
Stock and debt per mile of road, 34 miles .....	37,247 46

COST OF ROAD AND EQUIPMENT.

Total cost for construction and equipment of road and branches built by company.

Total expended for construction and equipment .....	\$1,187,875 95
Average cost per mile of road (not including sidings), 34 miles .....	34,937 53

DESCRIPTION OF ROAD.

MAIN LINE.

	Miles.
In Michigan, from Huron Bay to Champion iron mine.....	34

If north of parallel 44 of latitude:  
Between latitude 46 and 47.

Give date road commenced to be built:  
September, 1890.

Give date road completed:  
Not completed.

Give date road commenced to be operated:  
Never operated.

Where built from and to:  
Huron Bay to Champion iron mine.

Give exact number of miles:  
34.

Number of bridges and trestles in Michigan.

	Number.	Aggregate length, feet.
Wooden bridges .....	23	5,228½

## MICHIGAN RAILROAD RETURNS, 1896.

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender.....	2	\$35,000 00
Number of platform cars (36 feet long, low platform) .....	20	9,540 00
Other cars as follows:		
6 hand cars, \$270; 4 push cars, \$100; 2 iron laying cars, \$140 .....		510 00
Total.....	22	\$35,050 00
Number of locomotives equipped with power brakes.....		2
What patterns of power brakes have you in use, and number of locomotives and cars with each?		
Westinghouse air brake, automatic.		

STATE OF MICHIGAN, } ss.  
COUNTY OF WAYNE, }

Martin G. Borgman, the secretary of the Iron Range & Huron Bay Railroad Company, being duly sworn deposes and says that he has personally prepared the foregoing statements and declares them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of his knowledge and belief.

[L. S. OF R. R.]

Signed,

MARTIN G. BORGMAN.

Subscribed and sworn to before me this 30th day of March, A. D. 1897.

[L. S.]

CRAPO C. SMITH,

Notary Public, Wayne County, Mich.



ANNUAL REPORT  
OF THE  
LAKE SHORE & MICHIGAN SOUTHERN RAILWAY CO.

*For the year ending December 31, 1896.*

[Filed March 26, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, D. W. CALDWELL, Cleveland, Ohio.  
*Vice President*, E. D. WORCESTER, New York, N. Y.  
*Secretary*, E. D. WORCESTER, New York, N. Y.  
*Auditor*, R. H. HILL, Cleveland, Ohio.  
*Treasurer*, E. D. WORCESTER, New York, N. Y.  
*General Manager*, W. H. CANNIFF, Cleveland, Ohio.  
*General Superintendent*, P. S. BLODGETT, Cleveland, Ohio.  
*Division Superintendents*:  
 TRACY W. NILES, Supt. Eastern Division, Buffalo, N. Y.  
 J. K. RUSSELL, Supt. Toledo Division, Cleveland, Ohio.  
 L. E. JOHNSON, Supt. Michigan Division, Toledo, Ohio.  
 A. B. NEWELL, Supt. Western Division, Chicago, Ill.  
 A. H. SMITH, Supt. Franklin Division, Youngstown, Ohio.  
 H. A. WORCESTER, Supt. Detroit Division, Detroit, Mich.  
 M. L. REYNOLDS, Supt. Lansing Division, Hillsdale, Mich.  
 P. ALLEN, Supt. Kalamazoo Division, Grand Rapids, Mich.  
*Chief Engineer*, E. A. HANDY, Cleveland, Ohio.  
*Superintendent of Telegraph*, WM. KLINE, Toledo, Ohio.  
*Local Treasurer*, N. BARTLETT, Cleveland, Ohio.  
*General Passenger Agent*, A. J. SMITH, Cleveland, Ohio.  
*General Traffic Manager*, G. J. GRAMMER, Cleveland, Ohio.  
*General Counsel*, GEORGE C. GREENE, Cleveland, Ohio.

DIRECTORS.

W. K. VANDERBILT, New York, N. Y.  
 S. F. BARGER, New York, N. Y.  
 H. McK. TWOMBLY, New York, N. Y.  
 C. M. REED, Erie, Pa.  
 Terms expire, May, 1897.  
 F. W. VANDERBILT, New York, N. Y.  
 E. D. WORCESTER, New York, N. Y.  
 D. W. CALDWELL, Cleveland, Ohio.  
 C. M. DEFEW, New York, N. Y.  
 JNO. DEKOVEN, Chicago, Ill.  
 Terms expire, May, 1898.  
 C. VANDERBILT, New York, N. Y.  
 D. O. MILLS, New York, N. Y.  
 JAS. H. REED, Pittsburg, Pa.  
 I. M. SCHOONMAKER, Pittsburg, Pa.  
 Terms expire, May, 1899.

## MICHIGAN RAILROAD RETURNS, 1896.

## STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: 1846.  
 Number of stockholders at date of last election: 3,872.  
 Number of stockholders in Michigan at same date: 27.  
 Amount of full paid stock held in Michigan at same date: \$257,750.  
 Date of annual meeting of stockholders: First Wednesday in May.  
 Fiscal year of company ends December 31.  
 General offices of the company are located at Cleveland, Ohio.

## GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$20,198,967 54
Total expenses including taxes.....	\$18,726,154 67	
Net income.....		\$6,467,802 87
Interest on funded debt.....	\$3,117,745 00	
Interest on guaranteed stock.....	53,350 00	
Rentals of leased lines.....	629,119 39	
	\$3,800,214 39	
Balance applicable to dividends.....		2,667,588 48
Dividends declared (6 per cent).....	\$2,967,980 00	
Balance for the year.....	300,401 53	
Balance (profit and loss) last year.....		11,637,485 08
Items not included in above, as follows:		
Interest and dividends on assets.....	354,811 77	
Accounts written off.....	156,675 14	
Balance forwarded to next year.....		11,535,220 14

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$50,000,000 00
Par value of shares.....	\$100 00	
Number of shares issued.....	50,000	
Amount paid in on common.....	\$49,466,500 00	
Amount paid in on guaranteed.....	533,500 00	
Total amount paid in, as per books of the company.....		\$50,000,000 00
Paid in per mile of road owned by company, 854.54 miles.....		58,511 01

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
July 1, 1870, L. S. & M. S. consol. 1st mortgage.....	7%	July 1, 1900....	New York office and Union Trust Company, N. Y.	\$14,440,000 00
Apr. 1, 1899, L. S. Ry. dividend.....	7%	April 1, 1899....		1,355,000 00
Apr. 1, 1899, Buffalo & Erie mortgage.....	7%	April 1, 1898....		2,705,000 00
Dec. 1, 1873, L. S. & M. S. consol. 2d mortgage.....	7%	Dec. 1, 1908....		24,692,000 00
Total funded debt (L. S. & M. S. proper).....				\$43,192,000 00
Aug. 1, 1876, Det., Mon. & Toledo 1st mortgage.....	7%	Aug. 1, 1906....		924,000 00
Jan. 1, 1890, Kal. & Wh. Pigeon 1st mortgage.....	5%	Jan. 1, 1940....		400,000 00
Total funded debt.....				\$44,516,000 00

### RECAPITULATION.

Total funded debt.....		\$44,516,000 00
Amount of debt liabilities per mile of road 1,117.51 miles .....		39,884 99
Total amount of stock and debt .....		94,516,000 00
Stock and debt per mile of road.....	{ 854.54 miles, stock \$88,511 1,117.51 miles, debt 39,885 }	98,346 00

**GENERAL BALANCE SHEET.—Dr.**

Construction account.....	\$86,700,000 00	
Equipment account.....	17,800,000 00	
		\$84,000,000 00
Other investments:		
Detroit, Monroe & Toledo R. R.....	\$1,381,800 00	
Kalamazoo & White Pigeon R. R.....	610,000 00	
Northern Central Michigan R. R.....	1,357,000 00	
Detroit & Chicago R. R.....	942,850 04	
Silver Creek & Dunkirk R. R.....	484,201 72	
Jamestown & Franklin R. R.....	2,074,050 98	
Stocks, etc., of other companies.....	13,161,831 79	20,011,334 48
Cash items:		
Cash.....	\$1,825,019 57	
Bills receivable.....	38,211 14	
Due from agents.....	198,089 35	2,061,330 06
Other assets:		
Materials and supplies.....	\$948,568 45	
Debit balances from companies and individuals.....	1,204,498 92	
General office property and other real estate.....	486,007 59	2,639,069 96
Total.....		\$108,706,734 50

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....		\$50,000,000	00
Funded debt.....		44,516,000	00
Unfunded debt:			
Dividends unpaid.....	\$1,526,499	94	
Vouchers and accounts.....	1,129,014	42	
		2,655,514	86
Profit and loss or income accounts.....		11,836,220	14
Total.....		\$108,708,784	50

### COST OF ROAD AND EQUIPMENT.

**Total cost for construction and equipment of road and branches built by comp.ny.**

Total expended for construction and equipment.....	\$84,000,000	00
Average cost per mile of road (not including sidings) 854.54 miles.....	98,298	50
Proportion of cost for Michigan.....	18,312,517	66

## ANALYSIS OF EARNINGS.—IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

	Local fares.	Through fares.	Total passenger fares.	Express and baggage.	Mails.	Total.	Per train mile.	Per mile of road.
<b>Main line and branches</b>	\$253,542 60	\$41,822 62	\$295,365 22	\$84,575 07	\$258,916 88	\$553,881 12	.....	\$3,408 97
<i>Leased or proprietary roads:</i>								
Detroit, Monroe & Toledo	112,121 86	481 04	112,602 49	10,793 33	11,268 53	134,664 29	.....	2,459 17
Kalamazoo, Allegan & Grand Rapids	51,041 70	1,392 06	52,433 75	4,118 52	8,224 62	64,776 89	.....	1,108 24
Kalamazoo & White Pigeon	31,969 22	855 16	32,824 38	2,578 27	5,148 74	40,551 39	.....	1,109 78
Northwestern Central Michigan	87,788 05	60 02	87,848 07	1,777 25	3,829 14	92,747 46	.....	707 87
Fort Wayne & Jackson	36,444 98	76 98	36,521 91	2,868 98	4,059 80	42,450 64	.....	963 52
Detroit, Holland & Southwestern	17,180 59	12 03	17,192 62	1,460 24	4,207 06	22,879 92	.....	553 80
Detroit & Chicago	11,543 66	7 37	11,551 03	989 52	3,667 95	16,157 91	.....	285 52
Sturgis, Goshen & St. Louis	2,494 04	90	2,494 94	161 50	598 28	3,254 72	.....	308 50
<b>Total passenger department earnings</b>	\$553,076 18	\$44,708 17	\$597,784 35	\$109,292 63	\$299,920 36	\$1,004,997 84	\$1 08	\$1,750 48

## FREIGHT EARNINGS.

	Local traffic.	Through traffic.	Total traffic.	Other sources, freight department.	Total.	Per train mile.	Per mile of road.
<b>Main line and branches</b>	\$118,142 60	.....	\$118,142 60	\$870 76	\$418,813 36	.....	\$2,204 89
<i>Leased or proprietary roads:</i>							
Detroit, Monroe & Toledo	348,000 18	\$29,377 93	377,378 11	8,078 22	385,456 33	.....	7,089 01
Kalamazoo, Allegan & Grand Rapids	52,825 63	12,774 20	65,599 83	2,878 88	68,478 71	.....	1,171 58
Kalamazoo & White Pigeon	38,243 97	9,247 46	47,491 43	4,315 32	51,814 75	.....	1,418 08
Northwestern Central Michigan	38,073 40	4,692 81	42,766 21	1,000 07	43,766 28	.....	718 27
Fort Wayne & Jackson	38,141 39	8,948 17	47,089 56	341 65	47,431 21	.....	963 08
Detroit, Holland & Southwestern	12,178 35	1,285 17	13,463 52	14 54	13,478 06	.....	208 20
Detroit & Chicago	20,887 52	.....	20,887 52	6 27	20,893 79	.....	260 00
Sturgis, Goshen & St. Louis	1,747 41	.....	1,747 41	.....	1,747 41	.....	165 68
<b>Total freight department earnings</b>	\$602,740 45	\$61,385 74	\$1,024,076 19	\$17,306 71	\$1,041,384 90	\$1 80	\$1,810 26

**ANALYSIS OF EARNINGS.—ENTIRE LINES.**  
**PASSENGER EARNINGS.**

	Local fares.	Through fares.	Total passenger fares.	Express and baggage.	Mails.	Total.	Per train mile.	Per mile of road.
<b>Main line and branches</b> .....	\$9,119,631 49	\$947,304 97	\$4,006,836 46	\$907,544 55	\$1,355,618 83	\$6,029,999 34		\$7,056 40
<i>Leased or proprietary roads.</i>								
Madison (Cal) Railroad.....	22,417 27	14,239 41	36,656 68	5,845 83	4,804 95	46,837 46		983 03
Jameson & Franklin R. R. ....	46,669 21	324 75	46,993 96	3,552 55	5,843 26	56,889 79		1,107 84
Central Trunk R. R. ....	1,881 32	33 68	1,915 00	123 30	602 00	2,543 30		502 53
Detroit, Monroe & Toledo R. R. ....	127,783 55	515 23	128,298 78	12,293 09	12,834 32	153,376 19		2,459 13
Kalamazoo, Allegan & Grand Rapids R. R. ....	51,041 70	1,892 05	52,933 75	4,118 52	8,224 62	64,776 89		1,103 24
Kalamazoo & White Pigeon R. R. ....	31,999 22	863 16	32,862 38	2,578 27	5,148 74	40,551 39		1,109 78
Northorn Central Michigan R. R. ....	37,738 05	60 02	37,798 07	1,777 25	3,829 14	43,404 46		1,707 37
Fort Wayne & Jackson R. R. ....	77,901 23	153 91	78,055 14	6,305 34	8,922 64	93,298 11		963 63
Detroit, Hillsdale & Northwestern R. R. ....	17,180 59	12 03	17,192 62	1,450 24	4,207 06	22,879 92		253 80
Detroit & Chicago R. R. ....	12,493 75	7 37	12,501 12	1,016 80	3,989 00	17,486 92		235 22
Sturgis, Goshen & St. Louis R. R. ....	8,543 43	90	8,544 32	553 07	3,045 92	11,146 31		306 51
<b>Total passenger department earnings</b> .....	\$9,556,200 79	\$964,844 48	\$4,520,045 27	\$947,191 81	\$1,415,538 00	\$6,582,790 06	\$1 41	\$4,572 46

**FREIGHT EARNINGS.**

	Local Traffic.	Through traffic.	Total traffic.	Other sources, freight department.	Total.	Per train mile.	Per mile of road.
<b>Main line and branches</b> .....	\$3,194,808 14	\$9,237,879 01	\$11,532,777 15	\$234,179 82	\$11,806,956 97		\$13,816 74
<i>Leased or proprietary roads.</i>							
Madison (Cal) R. R. ....	453,542 34	151,154 43	604,696 77	2,562 87	607,259 64		12,096 81
Jameson & Franklin R. R. ....	127,572 94	2,623 12	130,196 06	945 89	131,011 95		2,573 40
Central Trunk R. R. ....	5,780 06		5,780 06		5,780 06		1,066 87
Detroit, Monroe & Toledo R. R. ....	415,908 15	13,907 46	429,815 61	8,386 23	438,203 83		7,026 83
Kalamazoo, Allegan & Grand Rapids R. R. ....	57,299 77	8,300 06	65,599 83	2,878 88	68,478 71		1,171 38
Kalamazoo & White Pigeon R. R. ....	41,483 05	6,010 38	47,493 43	4,318 32	51,814 75		1,418 08
Northorn Central Michigan R. R. ....	40,427 45	2,398 73	42,826 21	1,000 07	43,766 28		713 27
Fort Wayne & Jackson R. R. ....	88,774 09	3,730 43	92,504 52	1,722 23	94,226 75		963 17
Detroit, Hillsdale & Northwestern R. R. ....	12,786 89	681 63	13,468 52	14 54	13,483 06		206 20
Detroit & Chicago R. R. ....	22,084 42		22,084 42	9 71	22,074 13		360 04
Sturgis, Goshen & St. Louis R. R. ....	5,984 27		5,984 27	1 50	5,985 77		165 67
<b>Total freight department earnings</b> .....	\$9,496,324 62	\$3,576,525 25	\$13,043,019 87	\$245,992 05	\$13,289,041 92	\$1 30	\$9,230 66

Total transportation earnings, entire line .....	\$19,371,882 00
Transportation earnings per mile of road .....	\$13,808 14
Transportation earnings per train mile .....	1 65
Miscellaneous receipts from operating account, other than for transportation, as follows:	
From rents of tracks, yards and terminals .....	315,121 20
From other sources .....	7,004 34
Total .....	322,125 54
Total earnings from operation of road .....	20,193,957 54
Total earnings per mile of road .....	\$14,026 89
Total earnings per train mile .....	1 67
Income other than from earnings:	
Interest and dividends on assets .....	854,811 77
Total income from all sources .....	\$20,548,767 81
Proportion of income for Michigan .....	2,048,382 24

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway .....	\$1,098,709 15
Renewals of rails .....	215,638 39
Renewals of ties .....	303,109 09
Repairs and renewals of bridges and culverts .....	187,992 22
Repairs and renewals of fences, road crossings, signs and cattle guards .....	99,940 17
Repairs and renewals of buildings and fixtures .....	243,245 38
Repairs and renewals of docks and wharves .....	23,790 21
Repairs and renewals of telegraph .....	29,642 77
Stationery and printing .....	6,922 56
Other expenses .....	152 77
Total .....	\$2,209,142 69

## MAINTENANCE OF EQUIPMENT.

Superintendence .....	\$142,858 08
Repairs and renewals of locomotives .....	595,919 81
Repairs and renewals of passenger cars .....	238,838 40
Repairs and renewals of freight cars .....	1,637,613 45
Repairs and renewals of work cars .....	25,469 17
Repairs and renewals of marine equipment .....	3,926 55
Repairs and renewals of shop machinery and tools .....	71,843 90
Stationery and printing .....	9,893 65
Other expenses .....	46,048 68
Total .....	\$2,767,409 69

## CONDUCTING TRANSPORTATION.

Superintendence .....	\$251,061 46
Engine and roundhouse men .....	1,289,551 65
Fuel for locomotives .....	971,647 69
Water supply for locomotives .....	57,869 29
Oil, tallow and waste for locomotives .....	38,427 95
Other supplies for locomotives .....	12,790 85
Train service .....	847,937 67
Train supplies and expenses .....	139,417 31
Switchmen, flagmen and watchmen .....	863,647 97
Telegraph expenses .....	304,614 00
Station service .....	1,251,610 21
Station supplies .....	81,409 88
Switching charges—balance .....	122,402 75
Car mileage—balance .....	509,702 65
Loss and damage .....	87,541 12
Injuries to persons .....	149,961 58
Clearing wrecks .....	11,824 92
Advertising .....	25,148 13
Outside agencies .....	315,484 71
Commissions .....	1,585 80
Stock yards and elevators .....	15,228 50
Rents for tracks, yards and terminals .....	180,176 67
Rent of buildings and other property .....	6,894 53
Stationery and printing .....	140,597 77
Other expenses .....	7,912 09
Total .....	\$7,664,427 13

# LAKE SHORE & MICHIGAN SOUTHERN RAILWAY CO. 285

## GENERAL EXPENSES.

Salaries of general officers.....	\$87,183 12
Salaries of clerks and attendants.....	134,085 10
General office expenses and supplies.....	10,029 88
Insurance.....	2,756 25
Law expenses.....	65,287 97
Stationery and printing (general offices).....	9,101 40
Other expenses.....	14,818 07
Taxes.....	781,918 87

Total.....\$1,085,175 16

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	.16	\$2,209,142 09
Maintenance of equipment.....	.20	2,787,409 09
Conducting transportation.....	.56	7,664,427 13
General expenses, including taxes.....	.08	1,085,175 16
Total operating expenses and taxes.....	100.00	\$13,726,154 67
Operating expenses and taxes per mile of road.....		\$9,534 52
Operating expenses and taxes per train mile run for trains earning revenue, 12,046,719 miles.....	1 14	

## PROPORTION OF OPERATING EXPENSES AND TAXES FOR MICHIGAN.

Main line.....	\$633,845 88
Leased and proprietary roads:	
Detroit, Monroes & Toledo.....	348,635 72
Detroit & Chicago.....	62,351 20
Detroit, Hillsdale & Southwestern.....	56,304 93
Fort Wayne & Jackson.....	107,285 94
Northern Central Michigan.....	121,210 90
Kalamazoo & White Pigeon.....	91,110 91
Kalamazoo, Allegan & Grand Rapids.....	143,583 74
Sturgis, Goshen & St. Louis.....	12,529 15
Total estimated expenses in Michigan, 1896.....	\$1,876,538 37

Percentage of expenses to earnings, entire line.....	67.97
Net earnings per mile of road, entire line.....	4,492 59
Net earnings per train mile, entire line.....	53.7

## DESCRIPTION OF ROAD.

	MAIN LINE.	Miles.	Miles.
In Michigan, from State line Ohio and Mich. to State line Mich. and Ind. ....		116.07	
In New York, from Buffalo to State line New York and Pa.....		69.50	
In Pennsylvania, from State line N. Y. and Pa. to State line Pa. and Ohio.....		44.06	
In Ohio, from State line Pa. and Ohio to State line Ohio and Mich.....		194.44	
In Indiana, from State line Mich. and Ind. to State line Ind. and Ill.....		101.93	
In Illinois, from State line Ind. and Ill. to Chicago.....		14.02	
Total length completed.....			540.04
Length of double track.....	<div> <div>On branches.....</div> <div> <div>L. S.....73.24</div> <div>M. S.....102.91</div> </div> </div>	176.15	
Length of third track on main line.....	<div> <div>On main line*.....</div> <div> <div>L. S.....215.92</div> <div>M. S.....98.50</div> </div> </div>	314.42	490.57
			9.68

**BRANCHES.**

Sandusky, from Elyria Junction to Millbury Junction via. Sandusky.....	78.24
Sandusky Pier, from Sandusky Junction to old depot, Sandusky.....	3.58
Air Line, from Air Line Junction to Elkhart via. Air Line.....	131.10
Jackson, from Lenawee Junction to Jackson.....	42.16
Monroe, from Lenawee Junction to Monroe.....	29.45
Dunkirk, from Junction with D. A. V. & P. R. E. at Dunkirk.....	1.62
Ashtabula Harbor, from Ashtabula Harbor to main line crossing.....	2.33
Ashtabula, from Ashtabula to State line Ohio and Pennsylvania.....	30.72
Central Trunk, from State line Ohio and Pa. to Jamestown.....	5.26
Detroit, from Air Line Junction to Detroit.....	62.87
Kalamazoo, from White Pigeon to Kalamazoo.....	36.54
Lansing, from Jonesville to North Lansing.....	61.96
Sturgis, G. & St. L., from Goshen to Findley.....	86.13
Detroit & Chicago.....	
{ Chandler to Corbus.....	35.75
{ Grosvenor to Fayette.....	25.56
	61.31
Total length of branches owned by company*.....	577.47
Total length of branches owned by company in Michigan.....	291.47
Total length of road belonging to this company (owned).....	1,117.51
Total length of road belonging to this company in Michigan (owned).....	407.54
Aggregate length in Michigan of sidings, spurs and other tracks not above enumerated, owned, 82.11; on leased lines, 21.05.	
Aggregate length of tracks in Michigan belonging to this company, computed as single track.....	510.71
Gauge of track, 4 feet 8½ inches.	

*Proprietary or leased roads operated by this company.*

Name, description and length of each:	Total miles. In Michigan.	
Kalamazoo, Allegan & G. R. R. R., from Kalamazoo to Grand Rapids.....	58.45	58.45
Detroit, Hillsdale & S. W. R. R., from Ypsilanti to Bankers.....	64.76	64.76
Fort Wayne & Jackson R. R., from Fort Wayne to Jackson.....	97.83	44.52
Jamestown & Franklin R. R., from Jamestown to Oil City.....	50.91	
<b>Mahoning Coal R. R.:</b>		
From Andover to Youngtown.....	38.81	
From Doughton to State line Ohio & Pa.....	6.05	
From State line Ohio & Pa. to connection with N. Y. P. & O. R.		
R. at Sharon.....	1.95	
From State line Ohio & Pa. to Stewart Mills.....	0.31	
From Branch to No. 9 Coal Bank.....	2.85	
From Branch to Keel Ridge Coal Bank.....	0.78	
	<hr/>	<hr/>
	50.20	
<b>Total.....</b>	<hr/>	<hr/>
	322.15	167.73
<b>Total miles operated by company.....</b>	<hr/>	<hr/>
	1,439.66	575.27

**Number of bridges and trestles in Michigan.**

Number of bridges and trestles in Michigan.		Number.	Aggregate length, feet.
Wooden bridges.....		16	1,963.3
Stone bridges.....		2	120
Iron bridges.....		66	4,004.6
Wooden trestles.....		68	9,448.5
Total.....		152	15,536.2

**Draw bridges in Michigan.**

### How many on your line?

## Two.

**Where located, when built and length of draw span :**

One at Grand Rapids over Grand River, built in 1893, draw 142 feet 8 inches.

One at West Detroit over Rouge River, built in 1887, draw 165 feet.

\* Exclusive of 7.84 miles of double track owned by this company and leased to N. Y. C. & St. L. Ry. Co.



## Character of structure:

Both Pratt Truss.

## Material of which constructed:

Both iron.

## Height above water, and depth of water under bridge:

Grand River, 22 feet, depth 7 feet; Rouge River, 13 feet, depth 16 feet.

## How swung, by engine or hand power?

Both hand.

## Approaches straight or curved?

Grand River curved; Rouge River straight.

*Crossings.—Railroad and Highway.*

## What railroads cross your road at grade in this State, and at what locality?

Name of road.	Location.	Branch or line crossed.
G. R. & I.	Grand Rapids	Kalamazoo.
G. R. & I.	Plainwell	Kalamazoo.
G. R. & I.	Kalamazoo	Kalamazoo.
G. R. & I.	Kalamazoo "Y" to M. C.	Kalamazoo.
G. R. & I.	Sturgis	Goshen & Michigan.
G. R. & I.	Sturgis	Old road.
Michigan Central	Kalamazoo	Kalamazoo.
Michigan Central	Three Rivers	Kalamazoo.
Michigan Central	Homer	Lansing.
Michigan Central	Albion	Lansing.
Michigan Central	Eaton Rapids	Lansing.
Michigan Central	Jackson	Fort Wayne.
Michigan Central	Jackson	Jackson.
Michigan Central	Detroit	Detroit.
Michigan Central	West Detroit	Detroit.
Michigan Central	Monroe	Monroe (dock track).
Wabash	Raisin Centre	Jackson.
Wabash	Adrian	Old road.
Ann Arbor	Pittsfield Junction	Ypsilanti.
Ann Arbor	Federman	Monroe.
Ann Arbor	Dundee	Fayette.
C. & W. M.	Grand Rapids	Kalamazoo.
C. & W. M.	Grandville	Kalamazoo.
C. & G. T.	Schoolcraft	Kalamazoo.
C. & G. T.	South Lansing	Lansing.
F. & P. M.	Monroe	Monroe.
F. & P. M.	Carleton	Fayette.
C. J. & M.	Allegan	Kalamazoo.
C. J. & M.	Homer	Lansing.
C. J. & M.	Hanover	Fort Wayne.
C. J. & M.	Tecumseh	Jackson.
Union Terminal Ass'n	Delray (between West Detroit and Ecorse)	Detroit.
C. K. & S.	Kalamazoo	Kalamazoo.
Lansing Transit.	Lansing	Lansing.
C. & K. T.	Kalamazoo (Standard Wheel Company's track)	Kalamazoo.
L. S. & M. S.—G. & M. Branch	Sturgis	Old road.
L. S. & M. S.—Fort Wayne Branch	Fort Wayne Junction	Old road.
L. S. & M. S. Monroe Branch	Monroe (dock track)	Detroit.
L. S. & M. S. Monroe Branch	Lenawee Junction	Jackson (connected old road.)
L. S. & M. S.—Jackson Branch	Jackson	Fort Wayne Branch.

## What railroads cross your road either over or under your grade in this State, and where?

## Over:

C. J. &amp; M. R. R. at Woodstock.

## Under:

C. J. &amp; M. R. R. at Hudson and Jerome.

At what crossings are interlocking and derailing switches in operation?

Name of railroad.	Location.	Kind of apparatus.	Name of maker.
C. & W. M.	Grandville	Saxby-Farmer lever	U. S. & S. Co.
C. K. & S.	Kalamazoo	Gravit Wheel Mach.	Gravit Signal.
C. & G. T.	Schoolcraft	Saxby-Farmer lever	U. S. & S. Co.
C. & G. T. and M. C.	South Lansing	U. S. & S. Co. Wheel Machinery.	U. S. & S. Co.
M. C.	Albion	Saxby-Farmer lever	U. S. & S. Co.
M. C. & G. R. & I.	Kalamazoo	Saxby-Farmer lever	U. S. & S. Co.
M. C. & C. J. & M.	Homer	Saxby-Farmer lever	U. S. & S. Co.
M. C.	Woodward Ave. W. Detroit	Saxby-Farmer lever	U. S. & S. Co.
M. C.	Woodmere, W. Detroit	Saxby-Farmer lever	U. S. & S. Co.
Wabash	Raisin Centre	Saxby-Farmer lever	U. S. & S. Co.
Wabash	Adrian	Saxby-Farmer lever	U. S. & S. Co.
L. S. & M. S. Ft. Wayne Br.	Ft. Wayne Junction	Saxby-Farmer lever	U. S. & S. Co.
Union Terminal Assn.	Delray	Saxby-Farmer lever	U. S. & S. Co.

What pattern or patterns have you adopted?

Lever machines.	
Number of crossings of highways at grade in this State	873
Number of crossings of highways at grade in this State at which there are gates or flagmen	60
Number of crossings at which there are electric or automatic signals	2

What pattern or patterns in use?

O'Neil electric.	
Number of crossings of highways over or under railroad: over, 5; under 7	12
Number of highway bridges 13 feet above track	4
Number of highway bridges, less than 13 feet above track	1
Have safety guards been erected at overhead obstructions?	
Yes.	

Are your frogs and guard rails blocked as required by act 174, session laws of 1883.

Yes.

How are they treated?

By wood and cast blocking.

*Stations.*

Number of stations on whole line: L. S. 132, M. S. 208	340
Same in Michigan	124

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials	13,893
Same in Michigan	1,745

Classify your employees as per following list:

	Number.
Baggagemen	196
Brakemen	702
Conductors	351
Engineers	607
Firemen	637
Laborers	2,726
Shopmen	2,019
Yardmen	978
Others	5,677

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you	1,143.88
------------------------------------	----------

*Road bed and track.*

Number of track sections in Michigan.....	104
Average lengths of sections, miles.....	5.69
Average number of men in each section gang.....	4
Number of new ties put in whole line during the year.....	602,277
Number of new ties put in track in Michigan.....	125,556
Average number of new ties per mile of road, entire line.....	418
New rails put in track, entire line:	
Steel (tons 13,623) miles.....	109.36

*Bridges and culverts in Michigan.*

Amount of trestle work replaced with earth during the year (linear feet) ..... 2,096

Timber culverts replaced during the year:

With iron pipe.....	46
With timber.....	35
Total.....	81

New bridges built during the year.—In Michigan.

Nearest station.	Kind.	Material.	Month built.	Feet in length.
Dorr.....	Beam girder.....	Steel.....	November.....	23 ft. 4 in.
Dimondale.....	Plate ".....	".....	December.....	321 ft.
Horton.....	Beam ".....	".....	".....	15 ft. 4 in.
Mosherville.....	".....	".....	".....	28 ft. 4 in.
Sutton.....	Platt truss and 3-span plate girder.....	".....	October.....	255 ft. 8 in.
Alexis.....	Plate girder.....	".....	November.....	40 ft.
Monroe.....	Beam girder.....	".....	December.....	72 ft. 6 in.
Monroe.....	".....	".....	".....	48 ft.
Rockwood.....	".....	".....	".....	23 ft. 4 in.
Wyandotte.....	".....	".....	November.....	23 ft. 4 in.
Wyandotte.....	".....	".....	".....	19 ft. 4 in.
Cadmus.....	Plate girder.....	".....	January.....	34 ft. 6 in.
Cadmus.....	".....	".....	".....	70 ft.
Riga.....	".....	".....	August.....	13 ft. 4 in.

## ROLLING STOCK.

	Present esti- Number, mated value.
Number of locomotives of more than 30 tons weight, exclusive of tender.....	523 \$2,441,155 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender.....	25 77,500 00
Total.....	548 \$2,518,655 00
Number of passenger cars—12-wheel, including official cars.....	59
Number of passenger cars—8-wheel, including official cars.....	263
Number of express and baggage cars.....	98 \$1,043,122 00
Number of box freight cars.....	11,313
Number of stock cars.....	759
Number of platform cars.....	2,247
Number of ore cars.....	4,994 6,422,141 00
Number of conductors' way cars.....	234 98,303 00
Other cars.....	442 92,917 00
Total.....	20,464 \$7,656,483 00
Number of locomotives equipped with power brakes.....	543
Number of passenger train cars equipped with power brakes.....	423
Number of freight cars equipped with power brakes.....	12,480

What patterns of power brakes have you in use, and number of locomotives and cars with each?

Locomotives:		
Westinghouse air brakes.....	381	
American steam brakes.....	19	
Beal's brakes.....	1	
Lander's brakes.....	147	
		548
Cars: Westinghouse air brakes.		

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 83, session laws of 1887?

Yes.

What pattern or patterns have you adopted for use?

Gould.

How are your passenger cars heated?

L. S. & M. S. system of steam heat, and Baker heaters.

### MILEAGE, TRAFFIC, ETC.

#### Train mileage.

	Entire lines.	In Michigan.
Miles run by passenger trains during the year .....	4,655,339	931,731
Miles run by freight trains during the year.....	7,391,380	800,223
Total mileage of trains earning revenue.....	12,046,719	1,732,024

#### Passenger traffic.—Entire lines.

	Number.	Miles.	Rate.
Number of through passengers carried, earning revenue.....	98,312		
Number of local passengers carried, earning revenue.....	4,421,575		
Total number of passengers carried, earning revenue.....	4,519,887		
Number of passengers carried one mile .....	211,120,596		
Average distance carried.....		46.7	
Average amount received from each passenger.....			\$1 00
Average receipts per mile for through passengers.....			02.071
Average receipts per mile for local passengers.....			02.161
Average receipts per passenger per mile for all passengers.....			02.141
Estimated cost of carrying each passenger one mile.....			01.399

#### Passenger traffic.—In State of Michigan.

Number of through passengers carried, earning revenue .....	17,708		
Number of local passengers carried, earning revenue.....	918,414		
Total number of passengers carried, earning revenue.....	936,122		
Number of passengers carried one mile.....	25,906,574		
Average distance carried.....		26.7	
Average amount received from each passenger.....			\$0 64
Average receipts per mile for through passengers.....			02.166
Average receipts per mile for local passengers.....			03.320
Average receipts per passenger per mile for all passengers.....			02.307

#### Freight traffic.—Entire lines.

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	2,229,614		
Number of tons of local freight carried, earning revenue.....	11,431,805		
Total tons of freight carried earning revenue.....	13,662,419		
Total mileage of through freight.....		746,439,669	
Total mileage of local freight.....		1,630,544,449	
Total freight mileage or tons carried one mile.....		2,377,034,118	
Average ton haul for through freight.....			334.8
Average ton haul for local freight.....			142.6
Average ton haul for all freight.....			175.9
Average amount received for each ton haul.....			\$0 95.5
Average receipts ton per mile for through freight.....			00.479
Average receipts ton per mile, for local freight.....			00.581
Average receipts ton per mile for all freight.....			00.549
Estimated cost of carrying one ton one mile.....			00.387

LAKE SHORE & MICHIGAN SOUTHERN RAILWAY CO. 291

Freight traffic.—In State of Michigan.

Number of tons of through freight carried, earning revenue .....	115,109	
Number of tons of local freight carried, earning revenue .....	2,268,522	
Total tons of freight carried, earning revenue .....	2,383,631	
Total mileage of through freight .....	11,728,271	
Total mileage of local freight .....	128,365,431	
Total freight mileage or tons carried one mile .....	140,093,702	
Average ton haul for through freight .....	101.9	
Average ton haul for local freight .....	16.5	
Average ton haul for all freight .....	58.8	
Average amount received for each ton haul .....		\$0.43
Average receipts ton per mile, for through freight .....		00.523
Average receipts ton per mile for local freight .....		00.750
Average receipts ton per mile, for all freight .....		00.781

FREIGHT TRAFFIC MOVEMENT.—ENTIRE LINES.

Company's material excluded.

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain .....	249,175	770,348	1,019,518	7.46
Flour .....	121,814	168,188	289,952	2.12
Other mill products .....	64,948	152,276	217,224	1.59
Hay .....	80,285	98,572	178,857	1.27
Tobacco .....	409	9,090	9,499	0.07
Cotton .....	741	46,492	47,233	0.35
Fruit and vegetables, includes potatoes .....	63,854	138,816	202,670	1.48
Other agricultural products .....	43,248	42,017	85,265	0.63
<b>Products of animals:</b>				
Live stock .....	166,493	208,777	375,275	2.75
Dressed meats and dressed hogs .....	78,714	55,992	137,706	1.01
Other packing house products .....				
Other provisions and cured pork included. }	121,544	146,942	268,486	1.96
Poultry, game and fish .....	18,337	27,825	46,162	0.34
Wool .....	2,816	12,391	15,207	0.11
Hides and leather .....	17,924	29,257	47,181	0.35
<b>Products of mines:</b>				
Anthracite coal .....	417,318	258,551	675,869	4.95
Bituminous coal .....	145,001	2,992,640	3,137,641	22.96
Coke .....	3,783	353,777	357,560	2.62
Ores, pyrites and lead .....	2,314	1,238,482	1,238,796	9.04
Stone, sand, and other like articles .....	893,867	284,866	1,177,733	8.62
Salt .....	52,017	39,399	91,416	0.67
<b>Products of forest:</b>				
Lumber, timber, shingles and lath .....	107,149	433,129	540,278	3.96
Other forest products .....	71,629	87,406	159,034	1.16
<b>Manufactures:</b>				
Petroleum and other oils .....	272,076	98,021	370,097	2.71
Sugar .....	12,159	98,809	110,468	0.80
Iron, pig and bloom .....	59,241	121,538	181,074	1.32
Iron and steel rails .....	521	60,221	60,742	0.45
Other castings and machinery .....	193,086	291,649	484,735	3.55
Bar and sheet metal .....	88,192	78,787	166,929	1.22
Cement, brick, tile, lime, sewer pipe and plas- ter .....	125,257	212,186	337,443	2.48
Agricultural implements .....	27,253	20,124	47,377	0.35
Wagons, carriages, tools, etc. ....	157,429	155,238	312,662	2.29
Wines, liquors and beers .....	49,565	41,756	91,321	0.67
Household goods and furniture .....	23,305	24,063	45,370	0.33
<b>Merchandise and other articles</b> .....	170,395	332,153	502,548	3.68
<b>Miscellaneous:</b>				
Other commodities not mentioned above. ....	312,285	328,827	641,112	4.69
<b>Total tonnage</b> .....	4,213,629	9,448,790	13,662,419	100

## FREIGHT TRAFFIC MOVEMENT.—IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	56,235	103,635	159,870	6.71
Flour.....	72,006	81,146	153,152	6.43
Other mill products.....	23,396	26,776	50,172	2.10
Hay.....	36,114	13,355	49,969	2.10
Tobacco.....	42	1,347	1,389	.06
Cotton.....		3,912	3,912	.16
Fruit and vegetables, includes potatoes.....	18,747	35,663	54,410	2.28
Other agricultural products.....	6,419	13,451	19,870	.83
<b>Products of animals:</b>				
Live stock.....	25,466	4,713	30,179	1.27
Dressed meats and dressed hogs.....	230	30	260	.01
Other packing house products.....				
Includes other provisions and cured pork.....	7,274	3,525	10,799	.45
Poultry, game and fish.....	2,881	1,196	4,077	.17
Wool.....	859	363	1,222	.05
Hides and leather.....	1,401	2,364	4,265	.18
<b>Products of mines:</b>				
Anthracite coal.....	26	124,358	124,384	5.22
Bituminous coal.....	231	647,539	648,070	27.19
Coke.....	147	26,243	26,390	1.11
Ores, pyrites and lead.....	7	1,639	1,646	.07
Stones, sand and other like articles.....	39,553	45,999	85,552	3.59
Salt.....	538	19,886	20,424	.86
<b>Products of forest:</b>				
Lumber, timber, shingles and lath.....	23,210	227,050	250,260	10.50
Other forest products.....	23,887	25,195	49,082	2.06
<b>Manufactures:</b>				
Petroleum and other oils.....	4,191	59,449	63,640	2.67
Sugar.....	4,839	3,951	8,790	.37
Iron, pig and bloom.....	2,833	15,536	18,669	.78
Iron and steel rails.....	96	5,009	5,105	.21
Other castings and machinery.....	28,674	91,092	119,766	5.02
Bar and sheet metal.....	16,479	7,154	23,633	.99
Cement, brick, tile, lime, sewer pipe and plaster.....	17,872	54,622	72,494	3.04
Agricultural implements.....	4,659	5,967	10,626	.45
Wagons, carriages, tools, etc.....	40,647	29,409	70,056	2.94
Wines, liquors, and beers.....	7,276	7,520	14,796	.62
Household goods and furniture.....	9,656	8,741	18,397	.77
<b>Merchandise and other articles.....</b>	<b>15,475</b>	<b>56,008</b>	<b>71,478</b>	<b>3.00</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	61,912	74,915	136,827	5.74
<b>Total tonnage.....</b>	<b>553,278</b>	<b>1,830,353</b>	<b>2,383,631</b>	<b>100</b>

## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Co., Buffalo to Cleveland, pays from 15 cents to 50 cents per 100 lbs. on express freight.

United States Express Co., Buffalo to Chicago, pays from 20 cents to 85 cents per 100 lbs. on express freight.

These companies do a general express business and deliver freight to us at our depot.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?	
Total miles wire on entire line.....	15,368
Miles wire in Michigan owned by railway company.....	367
Miles wire in Michigan owned by Western Union Telegraph Co.....	1,911
Miles wire in Michigan owned jointly by Western Union Telegraph Co. and railway company.....	520
Miles wire in Michigan owned jointly by Postal Telegraph Co. and railway company.....	9
Total miles wire in Michigan.....	2,807

## TRANSPORTATION COMPANIES.

*Sleeping, drawing-room and palace car companies.*

What sleeping, drawing-room, chair or other palace passenger cars, not the exclusive property of your own or some other railroad company, have, during the year, been in use on your road in the State of Michigan, and on what terms? If rented by you, or allowed mileage between local points in this State, what was the amount paid for the use of such cars during the period under report?

Sleeping and parlor cars owned and operated by Wagner Palace Car Company which charges \$2.00 for double berths and \$4.00 for section, and from 25 cents to \$1.50 for seats in drawing room cars.

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

## KILLED.

*Employees.*

July 8, John Ott, brakeman, Sturgis. Fell off car.

*Trespassers.—(Not employees.)*

February 12, Mrs. Frank Moore, Grosvenor. Struck by train.  
January 12, Edwin Hand, Allen. Struck by train; intoxicated.  
May 9, Frederic Cruse, Three Rivers. Struck by train  
August 8, Louis Friend and Elmo Roberts, Blissfield. Struck by train; asleep on track.

*At Highway Crossings.—(Not employees)*

January 18, W. H. Bailey, Pittsford. Driving over crossing, struck by train.  
September 10, Welcome Merchant, Sturgis. Struck by train.  
November 12, Nelson Matthewson, West Detroit. Struck by train.

## INJURED.

*Employees.*

December 28, 1895, H. W. Alford, brakeman, D. & M. Junction. Coupling.  
March 6, W. T. Serviss, brakeman, Albion. Coupling.  
March 14, Frank Cooney, brakeman, Detroit. Struck by car.  
February 12, F. J. Engel, employé, Adrian. Jumped off moving train.  
February 12, J. D. Martin, laborer, Batavia. Struck by stone handled by derrick; accident.  
November 24, W. D. Campbell, engineer, Chase's Bridge. Fell off bridge.  
November 28, A. C. Knepper, brakeman, Sturgis. Coupling.  
December 10, R. Green, brakeman, Plainwell. Fell off car.  
December 19, E. T. Druland, brakeman, Detroit.

*Trespassers.—(Not employees.)*

March 26, Chas. Gifford, Bronson. Intoxicated.  
May 12, David Taylor, Sturgis. Jumped off moving train.  
July 13, Albert Pankow, West Detroit. Climbing between cars.  
November 21, Myron Butts, Pittsford. Tried to board train.

*At Highway Crossings.—(Not employees.)*

May 21, Mrs. W. H. Vendeburg, Pittsford. Driving; horse ran away, struck by train.  
September 21, Oliver H. Law, Detroit. Riding bicycle; ran into train.

## MICHIGAN RAILROAD RETURNS, 1896.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Coupling cars.....					4	
Falling from trains.....		1			1	
Getting on and off trains.....					1	
Highway crossings.....			3			2
Miscellaneous.....					3	
Trespassers on trains.....						3
Trespassers on tracks.....			5			1
Total.....		1	8		9	6

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year.....	9
Number of persons injured during the year.....	15

## CLASSIFICATION OF EMPLOYÉS.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Brakemen.....	1	6	7
Engineers.....		1	1
Laborers.....		1	1
Not classified above.....		1	1
Total.....	1	9	10

STATE OF OHIO, } ss.  
COUNTY OF CUYAHOGA, }

P. P. Wright, assistant general manager, and R. H. Hill, auditor, of the Lake Shore & Michigan Southern Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF P. R.]

Signed,

P. P. WRIGHT, *Assistant General Manager.*  
R. H. HILL, *Auditor.*

Subscribed and sworn to before me this 24th day of March, A. D. 1897.

[L. S.]

O. G. GETZEN-DANNER,  
*Notary Public.*



ANNUAL REPORT  
OF THE  
DETROIT & CHICAGO RAILROAD COMPANY.

*For the year ending December 31, 1896.*

[Filed January 20, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, D. W. CALDWELL, Cleveland, Ohio.  
*Secretary*, O. G. GETZEN-DANNER, Cleveland, Ohio.  
*Treasurer*, O. G. GETZEN-DANNER, Cleveland, Ohio.

DIRECTORS.

C. VANDERBILT, New York City.  
W. K. VANDERBILT, New York City.  
D. W. CALDWELL, Cleveland, Ohio.  
ASHLEY POND, Detroit, Mich.  
CHAS. F. COX, New York City.  
E. D. WORCESTER, New York City.  
SAM'L F. BARGER, New York City.  
D. W. PARDEE, New York City.  
O. G. GETZEN-DANNER, Cleveland, Ohio.  
Terms expire when their successors are elected.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: November 19, 1888.  
Number of stockholders at date of last election: 10.  
Number of stockholders in Michigan at same date: 1.  
Amount of full paid stock held in Michigan at same date: \$100.00.  
Date of annual meeting of stockholders: Second week in November.  
Fiscal year of company ends December 31.  
General offices of the company are located at Cleveland, Ohio.

REMARKS.

Entire capital stock owned by L. S. and M. S. R'y Co.

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association .....		\$1,000,000 00
Par value of shares .....	\$100 00	
Average price received per share .....	100 00	
Number of shares issued .....	10,000	
Amount paid in on common .....	\$1,000,000 00	
Total amount paid in, as per books of the company .....		\$1,000,000 00
Paid in per mile of road owned by company .....		16,049 00

## MICHIGAN RAILROAD RETURNS, 1896.

## COST OF ROAD AND EQUIPMENT.

## TOTAL COST FOR CONSTRUCTION AND EQUIPMENT OF ROAD AND BRANCHES BUILT BY OLD COMPANY.

Total expended for construction and equipment.....	\$5,176,557 58
Average cost of construction per mile of road (not including sidings), 62.31 miles.....	78,576 29
Proportion of cost of construction for Michigan.....	<u>4,789,416 54</u>

## DESCRIPTION OF ROAD.

MAIN LINE.		Miles.	Miles.
Length completed in Michigan.....		57.65	
Length completed in Ohio.....		4.66	
Total length completed .....			62.31
Total length of road belonging to this company .....			62.31
Total length of road belonging to this company in Michigan.....		57.65	
Aggregate length of sidings, spurs, and other tracks not above enumerated...		5.60	
Same in Michigan.....		5.19	
Aggregate length of tracks belonging to this company, computed as single track.....			67.91
Same in Michigan.....		62.34	
Gauge of track, 4 feet 8½ inches.			

STATE OF OHIO, } ss.  
COUNTY OF CUYAHOGA, }

D. W. Caldwell, president, and O. G. Getzen-Danner, secretary, of the Detroit & Chicago Railroad Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full and correct statement of the stock, debt and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

D. W. CALDWELL, *President.*

O. G. GETZEN-DANNER, *Secretary.*

Subscribed and sworn to before me this 12th day of January, A. D. 1897.

[L. S.]

W. T. SMITH,

*Notary Public.*

ANNUAL REPORT  
OF THE  
DETROIT, HILLSDALE & SOUTHWESTERN RAILROAD  
COMPANY,

*For the year ending December 31, 1896.*

[Filed February 3, 1897.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, ELIJAH SMITH, Boston, Mass.  
*Secretary*, P. W. SMITH, Boston, Mass.  
*Treasurer*, P. W. SMITH, Boston, Mass.  
*Transfer Agent*, Farmers' Loan & Trust Co., New York, N. Y.

DIRECTORS.

ELIJAH SMITH, Boston, Mass.  
PROSPER W. SMITH, Boston, Mass.  
CALEB W. LORING, Boston, Mass.  
EDWARD L. GIDDINGS, Boston, Mass.  
FRANK O. SQUIRE, Boston, Mass.  
EDWARD C. PERKINS, Boston, Mass.  
GEO. H. EAGER, Boston, Mass.  
LEVERETT S. TUCKERMAN, Boston, Mass.  
GEO. B. WARREN, Troy, N. Y.

Terms expire January 12, 1897.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: January 30, 1875.  
Number of stockholders at date of last election: 336  
Number of stockholders in Michigan at same date: 3.  
Amount of full paid stock held in Michigan at same date: \$1,700.00  
Date of annual meeting of stockholders: Second Tuesday in January.  
Fiscal year of company ends January 1.  
General offices of the company are located at Ypsilanti, Mich.

REMARKS.

The property of the Detroit, Hillsdale & Southwestern Railroad Company is leased in perpetuity to the Lake Shore & Michigan Southern Railway Company; lease is dated Sept. 3, 1881; the terms are \$40,500 per annum until July 1, 1883, and \$14,000 per annum thereafter, payable semi-annually on January 1st and July 1st; the lessee also pays \$500 per annum for organization expenses.

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$1,350,000 00
Par value of shares.....	\$100.00	
Average price received per share.....	100.00	
Number of shares issued.....	13,500	
Amount paid in on common.....		\$1,350,000 00
Total amount paid in as per books of the company.....		1,350,000 00
Paid in per mile of road owned by company.....		20,705 52

## MICHIGAN RAILROAD RETURNS, 1896.

## ANALYSIS OF DEBT ACCOUNTS.

Total amount of stock and debt .....	\$1,350,080 00
Stock and debt per mile of road .....	20,705 52

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road, and branches built by company.*

Total expended for construction .....	\$1,292,204 51
Average cost of construction per mile of road (not including sidings), 65.20 miles .....	19,819 09
Total expended for equipment .....	53,511 74
Average cost of equipment per mile, 65 20 miles .....	820 73
Proportion of cost of equipment for Michigan .....	820 73

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini: November, 1872.

MAIN LINE.		Miles.	Miles.
Length completed in Michigan .....		65.20	
Total length of road belonging to this company .....			65.20
Total length of road belonging to this company in Michigan .....	65.20		
Aggregate length of sidings, spurs, and other tracks not above enumerated .....			4.29
Same in Michigan .....	4.29		
Aggregate length of tracks belonging to this company computed as single track .....			69.49
Same in Michigan .....			69.49

Gauge of track, 4 feet 8½ inches.

STATE OF MASSACHUSETTS, } ss.  
COUNTY OF SUFFOLK,

Prosper W. Smith, secretary, of the Detroit, Hillsdale & Southwestern Railroad Company, being duly sworn deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declares them to be a true, full and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of his knowledge and belief.

[L. s. OF R. R.]

Signed,

PROSPER W. SMITH, *Secretary*.

Subscribed and sworn to before me this 18th day of January, A. D. 1897.

[L. s.]

PERCY G. BOLSTER,  
*Notary Public.*

**ANNUAL REPORT**  
OF THE  
**DETROIT, MONROE & TOLEDO RAILROAD COMPANY,**

*For the year ending December 31, 1896.*

[Filed January 20, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President*, D. W. CALDWELL, Cleveland, Ohio.  
*Secretary*, O. G. GETZEN-DANNER, Cleveland, Ohio.  
*Treasurer*, O. G. GETZEN-DANNER, Cleveland, Ohio.

**DIRECTORS.**

C. VANDERBILT, New York, N. Y.  
W. K. VANDERBILT, New York, N. Y.  
D. W. CALDWELL, Cleveland, Ohio.  
E. D. WORCESTER, New York, N. Y.  
D. W. PARDEE, New York, N. Y.  
ASHLEY POND, Detroit, Mich.  
GEO. C. GREENE, Cleveland, Ohio.  
P. P. WRIGHT, Cleveland, Ohio.  
ADDISON HILLS, Cleveland, Ohio.  
E. D. POTTER, JR., Toledo, Ohio.  
O. G. GETZEN-DANNER, Cleveland, Ohio.  
Terms expire when their successors are elected.

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: March 6, 1885.  
Number of stockholders at date of last election: 13.  
Number of stockholders in Michigan at same date: 1.  
Amount of full paid stock held in Michigan at same date: \$100.00.  
Date of annual meeting of stockholders: Fourth Tuesday in April.  
Fiscal year of company ends December 31.  
General offices of the company are located at Cleveland, Ohio.

**REMARKS.**

Entire capital stock except one share owned by L. S. & M. S. R'y Co.

**ANALYSIS OF CAPITAL STOCK.**

Amount authorized by charter or articles of association .....		\$414,100 00
Par value of shares .....		\$100 00
Number of shares issued .....	4,141	
Total amount paid in as per books of the company .....		\$414,100 00
Paid in per mile of road owned by company .....		6,640 47

## MICHIGAN RAILROAD RETURNS, 1896.

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage.....	7%	1906	-----	\$924,000 00

## RECAPITULATION.

Total funded debt.....	\$924,000 00
Total debt liabilities.....	\$924,000 00
Amount of debt liabilities per mile of road.....	14,832 00
Total amount of stock and debt.....	1,338,100 00
Stock and debt per mile of road.....	21,457.66

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year .....	\$64,680 00
Was it paid for the last year? Yes.	=====

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction.....	\$1,881,600 00
Average cost of construction per mile of road (not including sidings), 62.36 miles.....	22,155 23
Proportion of cost of construction for Michigan.....	1,193,881 88

## DESCRIPTION OF ROAD.

## MAIN LINE.

	Miles.	Miles.
Length completed in Michigan .....	54.67	
Length completed in Ohio.....	7.69	
Total length completed.....		62.36
Length of double track on main line.....		2.45

## BRANCHES.

Total length of road belonging to this company.....		62.36
Total length of road belonging to this company in Michigan.....	54.67	
Aggregate length of sidings, spurs, and other track not above enumerated.....		25.90
Same in Michigan.....	20.75	
Aggregate length of tracks belonging to this company, computed as single track.....		90.71
Same in Michigan.....		75.43

Gauge of track, 4 feet 8½ inches.

STATE OF OHIO, }  
COUNTY OF CUYAHOGA, } ss.

D. W. Caldwell, president, O. G. Getzen-Danner, secretary, of the Detroit, Monroe & Toledo Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

Signed,

[L. S. OF R. R.]

D. W. CALDWELL, *President.*  
O. G. GETZEN-DANNER, *Secretary.*

Subscribed and sworn to before me this 12th day of January, A. D. 1897.

[L. S.]

W. T. SMITH,  
*Notary Public.*

ANNUAL REPORT  
OF THE  
FORT WAYNE & JACKSON RAILROAD COMPANY,

*For the year ending December 31, 1897.*

[Filed March 26, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, SAMUEL SLOAN, New York City.  
*Secretary*, WHITTLESEY D. SEARLS, New York City.  
*Treasurer*, WHITTLESEY D. SEARLS, New York City.  
*Transfer Agent*, THE FARMERS' LOAN & TRUST CO., New York City.

DIRECTORS.

SAMUEL SLOAN, New York City.  
R. G. RALSTON, New York City.  
LAWRENCE TURNER, New York City.  
W. D. SEARLS, New York City.  
SAMUEL SLOAN, JR., New York City.  
S. S. PALMER, New York City.  
HENRY BESTE, New York City.  
WM. S. SLOAN, New York City.  
DWIGHT MERRIMAN, Jackson, Mich.  
J. F. JOY, Jackson, Mich.  
J. M. ROOT, Jackson, Mich.

Term expires January 23, 1897.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association signed: December 31, 1879.  
Number of stockholders at date of last election: 330 preferred, 77 common.  
Number of stockholders in Michigan at same date: 12.  
Amount of full paid stock held in Michigan at same date: \$114,800, par value.  
Date of annual meeting of stockholders: January 23, 1896.  
Fiscal year of company ends January 23, 1897.

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$27,275 48
Par value of shares .....	\$100	
Average price received per share: Issued for bonds.		
Number of shares issued.....	27,275	

## DESCRIPTION OF ROAD.

MAIN LINE.		Miles.	Miles.
Length completed in Michigan .....		44.54	
Length completed in Indiana .....		53.29	
Total length completed .....			97.83
Total length of road belonging to this company .....			97.83
Total length of road belonging to this company in Michigan .....	44.54		
Aggregate length of sidings, spurs, and other tracks not above enumerated .....			13.71
Same in Michigan .....	4.81		
Aggregate length of tracks belonging to this company, computed as single track .....			111.54
Same in Michigan .....	49.35		
Gauge of track, 4 feet 8½ inches.			

STATE OF NEW YORK, }  
COUNTY OF NEW YORK, } ss.

Samuel Sloan, president, and Whittlesey D. Searls, secretary, of the Fort Wayne & Jackson Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

SAM. SLOAN, *President.*

W. D. SEARLS, *Secretary.*

Subscribed and sworn to before me this 1st day of February, A. D. 1897.

[L. S.]

W. B. CARDOZO,

*Notary Public, No. 18, New York County.*



# ANNUAL REPORT

## OF THE

# KALAMAZOO, ALLEGAN AND GRAND RAPIDS RAILROAD COMPANY.

*For the year ending December 31, 1897.*

[Filed January 29, 1897.]

### OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President, J. H. WADE, Cleveland, Ohio.*  
*Secretary, O. G. GETZEN-DANNER, Cleveland, Ohio.*  
*Treasurer, HORACE B. CORNER, Cleveland, Ohio.*

### \*DIRECTORS.

O. M. BARNES, Lansing, Mich.  
 CHAS. A. OTIS, New York, N. Y.  
 J. H. WADE, New York, N. Y.  
 H. B. PERKINS, Warren, Ohio.  
 DAN. P. KELLS, Cleveland, Ohio.  
 D. W. CALDWELL, Cleveland, Ohio.  
 H. B. CORNER, Cleveland, Ohio.

Terms expire when their successors are elected.

### STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed, January 3, 1889.  
 Number of stockholders at date of last election: 99.  
 Number of stockholders in Michigan at same date: 9.  
 Amount of full paid stock held in Michigan at same date (30 shares): \$3,000.  
 Date of annual meeting of stockholders: First Wednesday in May.  
 Fiscal year of company ends, December 31.  
 General offices of the company are located at Cleveland, Ohio.

### ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$610,000 00
Par value of shares .....	\$100 00	
Number of shares issued.....	6,100	
Amount paid on common.....	\$610,000 00	
Total amount paid in, as per books of the company.....		610,000 00
Paid in per mile of road owned by company.....		10,441 68

### ANALYSIS OF DEBT ACCOUNTS.

#### FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage.....	5%	July 1, 1933.....		\$340,000 00

\* Two vacancies.

## MICHIGAN RAILROAD RETURNS, 1896.

## RECAPITULATION.

Total funded debt .....	\$840,000 00
Total debt liabilities .....	840,000 00
Amount of debt liabilities per mile of road (58.42 miles) .....	14,374 64
Total amount of stock and debt .....	1,450,000 00
Stock and debt per mile of road .....	24,820 27

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year .....	\$42,000 00
Was it paid for the last year? Yes.	

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road, and branches built by company.*

Total expended for construction .....	\$1,450,000 00
Average cost of construction per mile of road (not including sidings), 58.42 miles .....	24,820 00
Proportion of cost of construction for Michigan .....	1,450,000 00

## DESCRIPTION OF ROAD.

## MAIN LINE.

	Miles.	Miles.
Length completed in Michigan .....	58.42	
Total length of road belonging to this company .....		58.42
Total length of road belonging to this company in Michigan .....	58.42	
Aggregate length of sidings, spurs, and other tracks not above enumerated .....		11.58
Same in Michigan .....	11.58	
Aggregate length of tracks belonging to this company, computed as single track .....		70.00
Same in Michigan .....	70.00	

Gauge of track, 4 feet 8½ inches.

STATE OF OHIO, }  
COUNTY OF CUYAHOGA, } ss.

J. H. Wade, president, and O. G. Getzen-Danner, secretary, of the Kalamazoo, Allegan & Grand Rapids Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

J. H. WADE, *President*,  
O. G. GETZEN-DANNER, *Secretary*.

Subscribed and sworn to before me this 12th day of January, A. D., 1897.

[L. S.]

W. T. SMITH,  
*Notary Public*.

# ANNUAL REPORT

## OF THE

# KALAMAZOO & WHITE PIGEON RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed January 20, 1897.]

### OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, D. W. CALDWELL, Cleveland, Ohio.  
*Secretary and Treasurer*, O. G. GETZEN-DANNER, Cleveland, Ohio.

### DIRECTORS.\*

D. W. CALDWELL, Cleveland, Ohio.  
 O. G. GETZEN-DANNER, Cleveland, Ohio.  
 D. P. CLAY, Grand Rapids, Mich.  
 D. B. MERRILL, Kalamazoo, Mich.  
 J. W. OSBORNE, Kalamazoo, Mich.  
 P. P. WRIGHT, Cleveland, Ohio.

Terms expire when their successors are elected.

### STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: August 14, 1869.  
 Number of stockholders at date of last election: 8.  
 Number of stockholders in Michigan at same date: 4 individual stockholders and the L. S. & M. S. Ry. Co.  
 Amount of full paid stock held in Michigan at same date: 4 shares besides 2,302 held by L. S. & M. S. Ry. Co.  
 Date of annual meeting of stockholders: First Wednesday in May.  
 Fiscal year of company ends: December 31st.  
 General offices of the company are located at Cleveland, Ohio.

### ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$230,900 00
Par value of shares.....	\$100 00	
Number of shares issued.....	2,302	
Amount paid in on common.....		230,900 00
Total amount paid in as per books of the company.....		\$230,900 00
Paid in per mile of road owned by company.....		6,313 64

### ANALYSIS OF DEBT ACCOUNTS.

#### FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage.....	5%	Jan. 1, 1940		\$400,000 00

\* One vacancy.

## MICHIGAN RAILROAD RETURNS, 1896.

## RECAPITULATION.

Total funded debt.....	\$400,000 00
Amount of debt liabilities per mile of road, 36.57 miles.....	10,387 92
Total amount of stock and debt.....	630,300 00
Stock and debt per mile of road.....	17,261 56

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year..... \$30,000 00

Was it paid for the last year? Yes.

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction.....	\$610,000 00
Average cost of construction per mile of road (not including sidings) 36.57 miles.....	16,680 00
Proportion of cost of construction for Michigan.....	610,000 00

## DESCRIPTION OF ROAD.

MAIN LINE.		Miles.	Miles.
Length completed in Michigan.....		36.57	
Total length of road belonging to this company.....			36.57
Total length of road belonging to this company in Michigan.....		36.57	
Aggregate length of sidings, spurs, and other tracks not above enumerated.....			5.62
Same in Michigan.....		5.62	
Aggregate length of tracks belonging to this company, computed as single track.....			42.19
Same in Michigan.....		42.19	

Gauge of track, 4 feet, 8¼ inches.

STATE OF OHIO, }  
COUNTY OF CUYAHOGA, } ss.

D. W. Caldwell, president, and O. G. Getzen-Danner, secretary, of the Kalamazoo & White Pigeon Railroad Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the stock, debt and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

Signed,

[L. S. OF R. E.]

D. W. CALDWELL, *President.*

O. G. GETZEN-DANNER, *Secretary.*

Subscribed and sworn to before me this 12th day of January, A. D. 1897.

[L. S.]

W. T. SMITH,  
*Notary Public.*

ANNUAL REPORT  
OF THE  
NORTHERN CENTRAL MICHIGAN RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed January 20, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, D. W. CALDWELL, Cleveland, Ohio.  
*Secretary*, O. G. GETZEN-DANNER, Cleveland, Ohio.  
*Treasurer*, O. G. GETZEN-DANNER, Cleveland, Ohio.

DIRECTORS.

W. K. VANDERBILT, New York City.  
D. W. CALDWELL, Cleveland, Ohio.  
O. G. GETZEN-DANNER, Cleveland, Ohio.  
C. F. MITCHELL, Hillsdale, Mich.  
W. H. CANNIFF, Cleveland, Ohio.  
P. P. WRIGHT, Cleveland, Ohio.  
E. A. BILLINGS, Toledo, Ohio.  
H. A. WORCESTER, Hillsdale, Mich.  
R. A. MONTGOMERY, Lansing, Mich.  
Terms expire when their successors are elected.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: November 12, 1886.  
Number of stockholders at date of last election: 10.  
Number of stockholders in Michigan at same date: 3 individual stockholders and L. S. & M. S. R'y Co.  
Amount of full paid stock held in Michigan at same date: 3 shares in addition to stock held by L. S. & M. S. R'y Co.  
Date of annual meeting of stockholders: Third Wednesday in June.  
Fiscal year of company ends: December 31.  
General offices of the company are located at Cleveland, Ohio.

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$800,000 00
Number of shares issued .....	6,000	
Total amount paid in, as per books of the company.....		800,000 00
Paid in per mile of road owned by company, 61.14 miles.....		<u>9,977 12</u>

## MICHIGAN RAILROAD RETURNS, 1896.

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

First mortgage, 8%, due in 1903. All owned by L. S. & M. S. R'y Co.

## RECAPITULATION.

Total funded debt, authorized, but not issued .....	\$1,535,000 00
Amount of debt liabilities per mile of road .....	24,942 75
Total amount of stock and debt .....	<u>2,135,000 00</u>

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year .....	\$122,000 00
Was it paid for the last year? No; no bonds outstanding.	<u>          </u>

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road, and branches built by company.*

Total expended for construction .....	\$1,357,000 00
Average cost of construction per mile of road (not including sidings), 61.14 miles, .....	22,195 00
Proportion of cost of construction for Michigan .....	<u>1,357,000 00</u>

## DESCRIPTION OF ROAD.

## MAIN LINE.

	Miles.	Miles.
Length completed in Michigan .....	61.14	
Total length of road belonging to this company .....		61.14
Total length of road belonging to this company in Michigan .....	61.14	
Aggregate length of sidings, spurs, and other tracks not above enumerated .....	8.39	
Aggregate length of tracks belonging to this company, computed as single track .....		69.53
Gauge of track, 4 feet 8½ inches.		

STATE OF OHIO, } ss.  
COUNTY OF CUYAHOGA, }

D. W. Caldwell, president, and O. G. Getzen-Danner, secretary, of the Northern Central Michigan Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

D. W. CALDWELL, *President.*

O. G. GETZEN-DANNER, *Secretary.*

Subscribed and sworn to before me this 12th day of January, A. D. 1897.

W. T. SMITH,  
*Notary Public.*

ANNUAL REPORT  
OF THE  
STURGIS, GOSHEN & ST. LOUIS RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed January 20, 1897.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, D. W. CALDWELL, Cleveland, Ohio.  
*Secretary*, O. G. GETZEN-DANNER, Cleveland, Ohio.  
*Treasurer*, O. G. GETZEN-DANNER, Cleveland, Ohio.

DIRECTORS.

C. VANDERBILT, New York City.  
W. K. VANDERBILT, New York City.  
D. W. CALDWELL, Cleveland, Ohio.  
E. D. WORCESTER, New York City.  
W. H. CANNIFF, Cleveland, Ohio.  
P. P. WRIGHT, Cleveland, Ohio.  
O. G. GETZEN-DANNER, Cleveland, Ohio.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: October 29, 1889.  
Number of stockholders at date of last election: 8  
Number of stockholders in Michigan at same date: None.  
Amount of full paid stock held in Michigan at same date: None.  
Date of annual meeting of stockholders: First Wednesday in June.  
Fiscal year of company ends December 31.  
General offices of the company are located at Cleveland, Ohio.

REMARKS.

The Sturgis, Goshen & St. Louis Railroad was acquired by the L. S. & M. S. Ry. Co., as of December 1, 1889, and is operated by that company as a proprietary road.  
The entire capital stock, \$300,000, was turned over to the L. S. & M. S. Ry. Company, for which that company guaranteed the payment of the bonded debt of \$322,000; 100-year 3% bonds and interest.

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$2,000,000 00
Par value of shares.....		\$100 00
Number of shares issued.....	3,000	

## MICHIGAN RAILROAD RETURNS, 1896.

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage.....	3%	1899.....	New York City...	\$322,000 00

## RECAPITULATION.

Total funded debt.....	\$322,000 00
Amount of debt liabilities per mile of road.....	11,386 00
Total amount of stock and debt.....	<u>\$322,000 00</u>

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year.....	<u>\$9,680 00</u>
Was it paid for the last year? Yes.	

## DESCRIPTION OF ROAD.

MAIN LINE.		Miles.	Miles.
Length completed in Michigan.....		3.02	
Length completed in Indiana.....		23.26	
Total length completed.....			28.28
Total length of road belonging to this company.....			28.28
Total length of road belonging to this company in Michigan.....	3.02		
Aggregate length of sidings, spurs and other tracks not above enumerated.....			2.36
Same in Michigan.....	.03		
Aggregate length of tracks belonging to this company, computed as single track.....			30.64
Same in Michigan.....	3.05		
Gauge of track, 4 feet, 8½ inches.			

STATE OF OHIO, } ss.  
COUNTY OF CUYAHOGA, }

D. W. Caldwell, president, and O. G. Getzen-Danner, secretary, of the Sturgis, Goehen & St. Louis Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

D. W. CALDWELL, *President.*

O. G. GETZEN-DANNER, *Secretary.*

Subscribed and sworn to before me this 12th day of January, A. D. 1897.

[L. S.]

W. T. SMITH,  
*Notary Public.*



ANNUAL REPORT  
OF THE  
LIMA NORTHERN RAILWAY COMPANY,

*For the year ending December 31, 1896.*

[Filed May 1, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President*, J. B. MEGUNE, Cincinnati, Ohio.  
*Vice President*, H. L. BURNETT, New York, N. Y.  
*Secretary*, W. C. BROWN, Lima, Ohio.  
*Auditor*, E. B. HATHAWAY, Lima, Ohio.  
*General Manager*, C. H. ROSER, Lima, Ohio.  
*Superintendent*, G. R. HASKELL, Lima, Ohio.  
*Chief Engineer*, C. H. ROSER, Lima, Ohio.  
*General Passenger Agent*, F. E. FISHER, Springfield, Ohio.  
*General Freight Agent*, C. A. BARNAW, Springfield, Ohio.  
*General Counsel*, W. B. RICHIE, Lima, Ohio.

**DIRECTORS.**

J. B. MEGUNE, Cincinnati, Ohio.  
H. L. BURNETT, New York City.  
E. L. OPPENHEIM, New York City.  
C. E. BROADHEAD, Edgewater, N. J.  
J. B. TOWNSEND, Lima, Ohio.  
M. DONNELLY, Napoleon, Ohio.  
A. A. PURMAN, Ft. Wayne, Ind.  
GEO. H. SMITH, Chillicothe, Ohio.  
EMERY LATTAMER, Bryan, Ohio.

Terms expire when successors are elected.

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: March 27, 1895.  
Date of annual meeting of stockholders: First Monday in July.  
Fiscal year of company ends June 30.  
General offices of the company are located at Lima, Ohio.

**REMARKS.**

The Detroit & Cincinnati Railway Company's track in Seneca township, Lenawee county, Michigan, commencing at State line in section 2 (connecting with the Lima Northern Railway), and extending northward to a connection with the Wabash Railway, in Seneca township, Lenawee county, Michigan, a distance of about six and one half miles, was purchased by the Lima Northern Railway Co. July 6, 1896.

**ANALYSIS OF CAPITAL STOCK.**

Amount authorized by charter or articles of association.....		\$2,400,000 00
Par value of shares.....		\$100 00
Number of shares issued.....	24,000	
Paid in (nothing).....		

## ANALYSIS OF DEBT ACCOUNTS.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage bonds (50 years).....	5%	1945.....	New York.....	\$1,200,000 00

## ANALYSIS OF EARNINGS.—IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

<b>Main line and branches:</b>				
Local fares .....			\$165 50	
Through fares .....			15 60	
Total passenger fares .....			\$181 10	
Express and baggage.....			300 00	
Total passenger department earnings .....				\$481 10
Per train mile .....			\$0 34	
Per mile of road .....			30 06	

## FREIGHT EARNINGS.

<b>Main line and branches:</b>				
Local traffic .....			379 30	
Through traffic .....			1,460 95	
Total freight department earnings .....				1,840 25
Per train mile .....			\$2 92	
Per mile of road .....			115 11	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
 From State Line to Junction Wabash R'y, July 27, 1896.  
 From Junction to Adrian, Wabash track, July 27, 1896.

## MAIN LINE.

	Miles.	Miles
In Michigan, from State Line to Junction.....	6.4	
In Ohio, from Lima to Michigan State Line .....	71.8	
Total length completed.....		78.2

Total length of road belonging to this company.....	78.2
Total length of road belonging to this company in Michigan .....	6.4
Aggregate length of sidings, spurs and other tracks not above enumerated.....	1,050 feet.

Gauge of track, 4 feet 8½ inches.

*Proprietary or leased roads operated by this company.*

Trackage over Wabash from Junction to Adrian.

*Number of bridges and trestles in Michigan.*

	Feet.
Wooden trestles, one .....	434

*Crossings.—Railroad and highway.*

What railroads cross your road at grade in this State, and at what locality?  
 Fayette Branch L. S. & M. S. R. R. at 2¼ miles west of Weston.

Number of crossings of highways at grade in this State.....	8
-------------------------------------------------------------	---

*Stations.*

Number of stations on whole line.....	16
Same in Michigan.....	1

*Fencing in Michigan.*

How many miles of fencing have you?  
Posts up.

Give the number of miles required to complete fence both sides of track in Michigan and the counties in which needed:  
About 10 miles, all in Lenawee county.

*Road bed and track.*

Number of track sections in Michigan.....	1
Average length of section (miles).....	6 $\frac{1}{4}$
Average number of men in each section gang.....	8
Number of new ties put in whole line during the year.....	108,072
Number of new ties put in track in Michigan.....	17,180
Average number of new ties per mile of road.....	2,640
New rails put in track, (all) 60 lb. steel.....	

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender .....	11	\$15,000 00
Number of passenger cars—8 wheel, including official cars.....		6
Number of express and baggage cars.....		3

Number of passenger cars equipped with power brakes.....

What patterns of power brakes have you in use?  
Westinghouse.

How are your passenger cars heated?  
One train, 3 cars, steam. One train, 6 cars, stoves.

## MILEAGE, TRAFFIC, ETC.

	Entire line.	In Michigan.
Miles run by passenger trains during the year .....	52,800	9,800
Miles run by freight trains during the year .....	4,400	544
Miles run by mixed trains.....	31,680	4,700
Total mileage of trains earning revenue.....	88,880	14,844

*Passenger traffic.—Entire lines.*

	Numbers.	Miles.	Rate.
Number of through passengers carried earning revenue.....	925		
Number of local passengers carried earning revenue.....	27,807		
Total number of passengers carried earning revenue.....	28,732		
Average distance carried.....		27.7	
Average amount received from each passenger .....			\$0.32
Average receipts per mile for through passengers.....			.012
Average receipts per mile for local passengers.....			.01
Average receipts per passenger per mile for all passengers.....			.011

*Passenger traffic.—In State of Michigan.*

	Numbers.	Miles.	Rate.
Number of through passengers carried earning revenue.....	49		
Number of local passengers carried earning revenue .....	522		
Total number of passengers carried earning revenue .....	8,352		
Average distance carried.....		14.6	
Average amount received from each passenger .....			\$0.32
Average receipts per mile for through passengers.....			.02
Average receipts per mile for local passengers.....			.015
Average receipts per mile per passenger for all passengers.....			.017

## MICHIGAN RAILROAD RETURNS, 1896.

*Freight traffic.—Entire lines.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried earning revenue.....	63,433		
Number of tons of local freight carried earning revenue.....	8,706		
Total tons of freight carried earning revenue.....	72,139		
Total mileage of through freight .....		4,920	
Total mileage of local freight.....		9,838	
Total freight mileage or tons carried one mile .....		266,784	
Average ton haul for through freight.....		13	
Average ton haul for local freight.....		9	
Average ton haul for all freight.....		5	
Average amount received for each ton haul.....			\$0.28
Average receipts ton per mile for through freight.....			.016
Average receipts ton per mile for local freight.....			.048
Average receipts ton per mile for all freight.....			.052

*Freight traffic—In State of Michigan*

	Tons.	Miles.	Rate.
Number of tons of through freight carried earning revenue.....	9,082		
Number of tons of local freight carried earning revenue .....	897		
Total tons of freight carried earning revenue.....	9,959		
Total mileage of through freight .....		708	
Total mileage of local freight .....		679	
Total freight mileage or tons carried one mile .....		29,643	
Average ton haul for through freight.....		13	
Average ton haul for local freight.....		10	
Average ton haul for all freight.....		8	
Average amount received for each ton haul.....			\$0.18
Average receipts ton per mile, for through freight.....			.012
Average receipts ton per mile, for local freight .....			.031
Average receipts ton per mile for all freight.....			.022

## FREIGHT TRAFFIC MOVEMENT.—ENTIRE LINES.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	8,000	1,000	9,000	
Hay.....	9,000		9,000	
Fruit and vegetables.....	15	85	100	
Potatoes.....	8		8	
<b>Products of animals:</b>				
Live stock.....	1,000	100	1,100	
Poultry, game and fish.....	6	66	72	
Hides and leather.....	6		6	
<b>Products of mines:</b>				
Anthracite coal.....		800	800	
Bituminous coal.....		34,444	34,444	
Ores.....		2,500	2,500	
Stone, sand and other like articles.....	9	5	14	
Salt.....		4	4	
<b>Products of forest:</b>				
Lumber.....		3,000	3,000	
Logs and shingles.....	2,500		2,500	
<b>Manufactures:</b>				
Petroleum and other oils.....	3,240		3,240	
Iron, pig and bloom.....		150	150	
Cement, brick, and lime.....	25	150	175	
Agricultural implements.....		290	290	
Household goods and furniture.....	20	5	25	
<b>Merchandise.....</b>	<b>5,000</b>	<b>980</b>	<b>5,980</b>	
<b>Total tonnage.....</b>	<b>28,830</b>	<b>43,309</b>	<b>72,139</b>	

## FREIGHT TRAFFIC MOVEMENT.—IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight received from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
Products of agriculture:				
Hay.....	200		200	
Fruit and vegetables.....	15	85	100	
Potatoes.....		8	8	
Products of animals:				
Live stock.....		2	2	
Poultry, game and fish.....		31	31	
Products of mines:				
Anthracite coal.....		116	116	
Bituminous coal.....		7,296	7,296	
Ores.....		10	10	
Products of forest:				
Lumber.....		50	50	
Logs.....	250	41	291	
Manufactures:				
Petroleum and other oils.....	1,600		1,600	
Iron, pig and bloom.....		150	150	
Agricultural implements.....		100	100	
Household goods and furniture.....		5	5	
Total tonnage.....	2,065	7,894	9,959	

## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?  
National.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
78.2 miles. Western Union.

STATE OF OHIO, } ss.  
COUNTY OF ALLEN, }

E. B. Hathaway, auditor, of the Lima Northern Railway Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declares them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of his knowledge and belief.

[L. s. OF E. E.]

Signed,

E. B. HATHAWAY, Auditor.

Subscribed and sworn to before me this 30th day of April, A. D. 1897.

[L. s.]

R. B. TARAN,  
Notary Public, Allen Co., Ohio.

ANNUAL REPORT  
OF THE  
LOWELL & HASTINGS RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed May 1, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*General Manager, M. L. SWEET, Grand Rapids, Mich.  
Secretary and Treasurer, McGEORGE BUNDY, Grand Rapids, Mich.  
Auditor and Traffic Manager, W. H. CLARK, Lowell, Mich.*

DIRECTORS.

*M. L. SWEET, Grand Rapids, Mich.  
H. J. HOLLISTER, Grand Rapids, Mich.  
McGEORGE BUNDY, Grand Rapids, Mich.  
WM. WINEGAR, Grand Rapids, Mich.  
GEO. H. TUXBURY, Hart, Mich.  
Terms expire when successors are elected.*

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

*When chartered or articles of association filed: May 6, 1887.  
Number of stockholders at date of last election: 7.  
Number of stockholders in Michigan at same date: 7.  
Date of annual meeting of stockholders: June 3.  
Fiscal year of company ends: Calendar year.  
General offices of the company are located at Grand Rapids and Lowell.*

GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$11,139 51
Total expenses, including taxes.....	\$10,664 49	
Net income or deficit.....		\$475 02
Balance for the year.....		475 02
Balance (profit and loss) last year .....		2,661 73
Balance forward to next year.....		<u>\$3,136 75</u>

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$200,000 00
Par value of shares.....	\$100 00	
Number of shares issued.....	1,896	
Amount paid in on common.....		\$190,120 00
Total amount as per books of the company.....		190,120 00
Per mile of road owned by company, 12¼ miles.....		15,308 60

## ANALYSIS OF DEBT ACCOUNTS.

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For construction.....		
For equipment.....		
For real estate.....		
For renewals.....		
For miscellaneous.....		
For current balances.....		
Total unfunded debt.....		\$38,905 00

## RECAPITULATION.

Total debt liabilities.....	\$38,905 00
Amount of debt liabilities per mile of road, 12¼ miles.....	3,112 40
Total amount of stock and debt.....	\$228,025 00
Stock and debt per mile of road, 12¼ miles.....	18,322 00

## GENERAL BALANCE SHEET.—Dr.

Construction account.....		
Equipment account.....		
Real estate.....		
Other assets:		
Materials and supplies.....		1,000 00
Loss brought forward.....	\$8,905 00	
Total.....		\$229,025 00

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$190,120 00
Unfunded debt:	
Notes payable.....	38,905 00
Total.....	\$229,025 00

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction and equipment.....	\$228,025 00
Average cost per mile of road (not including sidings), 12¼ miles.....	18,322 00
Proportion of cost for Michigan.....	228,025 00

*Purchased by present company.*

Original cost to present company, of road and equipment.....	\$228,025 00
Total cost to date of report.....	228,025 00
Average cost per mile of road (not including sidings), 12¼ miles.....	18,322 00



## ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

Main line and branches:		
Local fares .....	\$2,854 00	
Total passenger fares .....	\$2,854 00	
Express and baggage .....	86 68	
Mails .....	547 84	
Other sources .....	161 00	
Total passenger department earnings .....		\$3,649 02
Per train mile .....	90 19	
Per mile of road .....	291 92	

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic .....	\$7,490 49	
Total traffic .....	\$7,490 49	
Total freight department earnings .....		7,490 49
Per train mile .....	90 87	
Per mile of road .....	599 24	
Total transportation earnings, entire line .....		11,139 51
Transportation earnings per mile of road .....	891 16	
Transportation earnings per train mile .....	56	
Total earnings from operation of road .....		11,139 51
Total earnings per mile of road .....	891 16	
Total earnings per train mile .....	56	
Proportion of taxable earnings for Michigan .....		11,139 51
Total taxable earnings per mile of road in Michigan .....	891 16	
Total income from all sources .....		\$11,139 51
Proportion of income for Michigan .....		11,139 51

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway .....	\$1,762 58
Renewals of ties .....	1,168 00
Total .....	\$2,927 58

## MAINTENANCE OF EQUIPMENT.

Repairs and renewals of locomotives .....	\$350 00
Repairs and renewals of passenger cars .....	50 00
Repairs and renewals of freight cars .....	66 27
Total .....	\$466 27

## CONDUCTING TRANSPORTATION.

Engine and roundhouse men .....	\$1,800 00
Fuel for locomotives .....	1,182 80
Oil, tallow and waste for locomotives .....	140 00
Other supplies for locomotives .....	21 00
Train service .....	1,070 00
Train supplies and expenses .....	100 00
Station service .....	2,112 00
Station supplies .....	115 40
Stationery and printing .....	200 00
Other expenses .....	254 25
Total .....	\$6,995 25

## GENERAL EXPENSES.

Other expenses .....	\$3 63
Taxes .....	241 76
Total .....	\$275 39

RECAPITULATION OF EXPENSES.		Per cent of expenses.	
Maintenance of way and structures .....	.27	\$2,927 58	
Maintenance of equipment .....	.04	466 27	
Conducting transportation .....	.66	6,995 25	
General expenses, including taxes .....	.08	275 39	
Total operating expenses and taxes .....	100	\$10,664 49	
Operating expenses and taxes per mile of road .....		\$853 16	
Operating expenses and taxes per train mile run, for trains, earning revenue, 2,000 miles .....	\$0 53		
Total proportion of expenses for Michigan .....		10,664 49	
Percentage of expenses to earnings .....	98.00		
Net earnings per mile of road .....	\$38 00		
Net earnings per train mile .....	.03		

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Lowell to Freeport, December, 1887.

MAIN LINE.		Miles.	Miles.
In Michigan, from Lowell to Freeport .....		12.50	
Total length completed .....			12.50

BRANCHES.			
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated .....	1.00		
Aggregate length of tracks in Michigan belonging to this company, computed as single track .....			13.50

Gauge of track, 4 feet 8½ inches.

Number of bridges and trestles in Michigan.		Number.	Aggregate length feet.
Wooden bridges .....		10	670

## Crossings.—Railroad and highway.

What railroads cross your road at grade in this State and at what locality?

Detroit, Lansing & Northern R. E. at Elmdale.  
Detroit, Grand Haven & Milwaukee R. E. at Lowell.

At what crossings are interlocking and derailing switches in operation?  
Elmdale and Lowell.

What pattern or patterns have you adopted?  
Gravitt, Allentown.

Number of crossings of highways at grade in this State: 17.

Are your frogs and guard rails blocked as required by act 174, Session Laws of 1883?  
Yes.

How are they treated?  
Blocked with wood.

Stations.			
Number of stations on whole lines .....			3
Same in Michigan .....			3

## Employés.

Number of persons regularly employed on all roads operated by company, including officials .....	15
Same in Michigan .....	15

Classify your employés as per following list:

	Number.
Brakemen .....	1
Conductors .....	1
Engineers .....	1
Firemen .....	1
Laborers .....	4
Shopmen .....	1
Others .....	6

# LOWELL & HASTINGS RAILROAD COMPANY.

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## REPAIRS AND RENEWALS.

### *Fencing in Michigan.*

How many miles of fencing have you?.....	22
Give the number of miles required to complete fence both sides of your track in Michigan, and the counties in which needed:	
Kent.....	3
Total miles required .....	3

### *Road bed and track.*

Number of track sections in Michigan.....	1
Average lengths of sections, miles.....	.12½
Average number of men in each section gang.....	4
Number of new ties put in whole line during the year.....	5,600
Number of new ties put in track in Michigan.....	5,600
Average number of new ties per mile of road.....	448

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender .....	2	\$6,000.00
Total.....	2	\$6,000 00
Number of combination cars—8-wheel, including official cars.....	1	\$1,500 00
Number of platform cars.....	5	1,500 00
Total.....	6	\$3,000 00
Number of locomotives equipped with power brakes.....	1	
Number of passenger-train cars equipped with power brakes .....	1	

What patterns of power brakes have you in use, and number of locomotives and cars with each?  
Westinghouse.

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 85, session laws of 1887?  
Yes.

What pattern or patterns have you adopted for use?  
M. C. B. Janney.

How are your passenger cars heated?  
Baker heater.

## MILEAGE, TRAFFIC, ETC.

### *Train mileage.*

	All in Michigan.
Miles run by mixed trains .....	20,000

### *Passenger traffic.—Road all in State of Michigan.*

	Number.	Miles.	Rate.
Number of local passengers carried, earning revenue.....	15,900		
Total number of passengers carried, earning revenue.....	15,900		
Number of passengers carried one mile.....	111,300		
Average distance carried.....		7	
Average amount received from each passenger.....			\$0 18
Average receipts per mile for local passengers.....			02.57
Average receipts per passenger per mile for all passengers.....			02.57
Estimated cost of carrying each passenger one mile.....			05

## MICHIGAN RAILROAD RETURNS, 1896.

*Freight traffic.—Road all in State of Michigan.*

	Tons.	Miles.	Rate.
Number of tons of local freight carried, earning revenue.....	13,543		
Total tons of freight carried, earning revenue.....	13,543		
Total mileage of local freight.....		20,000	
Total freight mileage or tons carried one mile.....		94,801	
Average ton haul for local freight.....		7	
Average ton haul for all freight.....		7	
Average amount received for each ton haul.....			\$0 55
Average receipts ton per mile, for local freight.....			07.8
Average receipts ton per mile, for all freight.....			07.8
Estimated cost of carrying one ton one mile.....			10

## FREIGHT TRAFFIC MOVEMENT.—ROAD ALL IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	1,009		1,009	7.45
Flour.....	1,550		1,550	11.44
Other mill products.....	290		290	2.14
Hay.....	180		180	1.43
Fruit and vegetables.....	660		660	4.87
Potatoes.....	1,200		1,200	8.86
<b>Products of animals:</b>				
Live stock.....	793		793	5.85
Poultry, game and fish.....	80		80	.59
Wool.....	101		101	.74
<b>Products of mines:</b>				
Anthracite coal.....		540	540	3.96
Bituminous coal.....		423	423	3.12
Salt.....		72	72	.53
<b>Products of forest:</b>				
Lumber.....	910	1,960	2,870	21.17
Shingles.....		50	50	.37
<b>Manufactures:</b>				
Cement, brick and lime.....		100	100	.74
Agricultural implements.....		112	112	.83
Wines, liquors and beers.....		30	30	.22
Household goods and furniture.....	20	22	42	.31
<b>Merchandise.....</b>	<b>1,010</b>	<b>1,602</b>	<b>2,612</b>	<b>19.26</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	219	610	829	6.12
<b>Total tonnage.....</b>	<b>8,022</b>	<b>5,521</b>	<b>13,543</b>	<b>100</b>

ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express.

One and one-half and one and one-tenth first-class freight rates; takes freight at depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

12½ miles; belongs to this company.

STATE OF MICHIGAN, } ss.  
COUNTY OF KENT,

McGeorge Bundy, secretary and treasurer of the Lowell & Hastings Railroad Company, being duly sworn deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of his knowledge and belief.

Signed,

[L. S. OF R. R.]

McGEORGE BUNDY.

Subscribed and sworn to before me this 30th day of April, A. D. 1897.

ZENA SLATTON,  
Notary Public, Kent Co., Mich.

ANNUAL REPORT  
OF THE  
MANISTEE & GRAND RAPIDS RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed April 30, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, JOHN CANFIELD, Manistee, Mich.  
*Vice President*, LOUIS SANDS, Manistee, Mich.  
*Secretary*, T. J. RAMSDELL, Manistee, Mich.  
*Auditor*, E. N. SALLING, Manistee, Mich.  
*Treasurer*, E. G. FILER, Filer City, Mich.  
*General Manager*, JOHN CANFIELD, Manistee, Mich.  
*Superintendent*, WM. H. HERBERT, Manistee, Mich.  
*Assistant Auditor*, H. W. MARSH, Manistee, Mich.  
*Chief Engineer*, E. W. MUENSCHER, Manistee, Mich.  
*Cashier*, H. W. MARSH, Manistee, Mich.  
*General Freight Agent*, H. W. MARSH, Manistee, Mich.  
*Attorney*, T. J. RAMSDELL, Manistee, Mich.

DIRECTORS.

E. G. FILER, Filer City, Mich.  
JOHN CANFIELD, Manistee, Mich.  
E. N. SALLING, Manistee, Mich.  
JAMES DEMPSEY, Manistee, Mich.  
R. E. BLACKER, Manistee, Mich.  
LOUIS SANDS, Manistee, Mich.  
T. J. RAMSDELL, Manistee, Mich.

Terms expire January 19, 1898.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: November 11, 1889.  
Number of stockholders at date of last election: 8.  
Number of stockholders in Michigan at same date: 8.  
Amount of full paid stock held in Michigan at same date: 50 shares.  
Date of annual meeting of stockholders: Third Wednesday in January.  
Fiscal year of company ends December 31.  
General offices of the company are located at Manistee, Mich.

GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$35,049 89
Total expenses, including taxes.....	\$25,154 79	
Net income.....		\$9,895 10
Balance applicable to dividends.....		\$9,895 10
Balance for the year.....		\$9,895 10
Balance, profit and loss last year.....		\$93,306 12
Balance forward to next year.....		\$93,001 22

**MANISTEE & GRAND RAPIDS RAILROAD COMPANY. 325**

**ANALYSIS OF CAPITAL STOCK.**

Amount authorized by charter or articles of association.....		\$1,000,000
Par value of shares.....	\$100 00	
Number of shares issued.....	50	
Amount paid in on common.....	\$5,000 00	
Amount paid in on shares not issued (number), 5,000.....	445,000 00	
Total amount paid in, as per book of the company.....		450,000 00
Paid in per mile of road owned by company, 44.71.....		10,087 10

**ANALYSIS OF DEBT ACCOUNTS.**

Total amount of stock and debt.....	\$450,000 00
Stock and debt per mile of road, 44.71 miles.....	10,087 10

**GENERAL BALANCE SHEET.—Dr.**

Construction account.....	\$452,148 42
Equipment account.....	50,251 40
Other investments (specifying same):	
Fence account.....	2,070 29
Dock No. 2.....	688 22
Real estate.....	18,337 70
Tools.....	887 95
Cash items:	
Cash.....	\$3,427 22
Bills receivable.....	5,409 85
Other assets:	
Materials and supplies.....	\$9,729 43
Insurance unearned.....	905 74
Total.....	\$543,201 22

**GENERAL BALANCE SHEET.—Cr.**

Capital stock.....	\$450,000 00
Profit and loss or income accounts.....	93,201 22
Total.....	\$543,201 22

**COST OF ROAD AND EQUIPMENT.**

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction and equipment.....	\$504,470 11
Average cost per mile of road (not including sidings) 44.71 miles.....	11,288 16
Proportion of cost for Michigan, 100%.....	

**CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.**

**MAIN LINE.**

Extensions and new sidings.....	\$59,042 59
New buildings.....	596 59
New fences.....	687 10
Machinery and tools.....	1,068 25
Total charges.....	\$60,326 28
Total charges to property account as above.....	60,326 28
Property sold and credited.....	1,068 25
Net addition to property account.....	59,258 03

## ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

PASSENGER EARNINGS.		
Main line and branches:		
Local fares .....	\$1,042 42	
Total passenger fares .....	\$1,042 42	
Total passenger department earnings .....		\$1,042 42
Per train mile .....	\$0 05	
Per mile of road .....	23 31	
FREIGHT EARNINGS.		
Main line and branches:		
Local traffic .....	\$32,405 85	
Through traffic .....	1,426 78	
Total traffic .....	\$33,832 63	
Total freight department earnings .....		\$33,832 63
Per train mile .....	\$1 58	
Per mile of road .....	756 71	
Total transportation earnings, entire line .....		\$34,375 05
Transportation earnings per mile of road .....	\$780 02	
Transportation earnings per train mile .....	1 62	
Miscellaneous receipts from operating account, other than for transportation, as follows:		
From car mileage balance .....	8 84	
From switching charges balance .....	171 00	
Total .....		35,049 89
Total earnings from operation of road .....	\$35,049 89	
Total earnings per mile of road .....	783 94	
Total earnings per train mile .....	1 63	
Total income from all sources .....		\$35,049 89
Proportion of income for Michigan, 100% .....		

## ANALYSIS OF EXPENSES.

MAINTENANCE OF WAY AND STRUCTURES.		
Repairs of roadway .....	\$5,991 54	
Renewals of ties .....	2,076 76	
Repairs and renewals of bridges and culverts .....	67 21	
Repairs and renewals of fences, road crossings, signs and cattle guards .....	18 98	
Repairs and renewals of buildings and fixtures .....	639 89	
Repairs and renewals of docks and wharves .....	81 48	
Other expenses .....	239 53	
Total .....		9,115 39
MAINTENANCE OF EQUIPMENT.		
Repairs and renewals of locomotives .....	\$1,870 80	
Repairs and renewals of freight cars .....	1,432 03	
Other expenses .....	62 01	
Total .....		\$3,414 87
CONDUCTING TRANSPORTATION.		
Superintendence .....	\$1,263 53	
Engine and roundhouse men .....	1,376 85	
Fuel for locomotives .....	2,302 81	
Water supply for locomotives .....	263 59	
Oil, tallow and waste for locomotives .....	178 28	
Other supplies for locomotives .....	30 40	
Train service .....	1,457 99	
Switchmen, flagmen and watchmen .....	500 62	
Loss and damage .....	119 67	
Stationery and printing .....	23 75	
Other expenses .....	976 45	
Total .....		\$8,493 97



# MANISTEE & GRAND RAPIDS RAILROAD COMPANY. 327

## GENERAL EXPENSES.

Salaries of clerks and attendants.....	\$840 00
General office expenses and supplies.....	141 90
Insurance.....	567 01
Stationery and printing (general offices).....	67 32
Taxes.....	2,514 38
<b>Total.....</b>	<b>\$4,130 56</b>

## RECAPITULATION OF EXPENSES.

Maintenance of way and structures.....	\$9,115 89
Maintenance of equipment.....	3,414 87
Conducting transportation.....	8,493 97
General expenses, including taxes.....	4,130 56
<b>Total operating expenses and taxes.....</b>	<b>\$25,154 79</b>
Operating expenses and taxes per train mile run, for trains earning revenue, 21,477 miles.....	\$1 17
Total proportion of expenses for Michigan.....	25,154 79
Percentage of expenses to earnings.....	71.77
Net earnings per mile of road.....	221 32
Net earnings per train mile.....	46

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
 From Manistee, Mich., to C. & W. M. Junction, Dec. 20, 1892.  
 From C. & W. M. Junction to Sec. 9, T. 19 R. 11 W, July 1, 1896.

### MAIN LINE.

	Miles.	Miles.
In Michigan, from Manistee to Canfield Junction.....		44.71
<b>Total length completed.....</b>		<b>44.71</b>
Total length of road belonging to this company in Michigan.....	44.71	
Aggregate length in Michigan of sidings, spurs and other tracks not above enumerated.....	13.52	
<b>Aggregate length of tracks in Michigan belonging to this company, computed as single track.....</b>		<b>58.23</b>

Gauge of track, 4 feet 8½ inches.

If north of parallel 44 of latitude.  
 Yes.

Give date road commenced to be built:  
 December 18, 1889.

Give date road completed to present terminus:  
 July 1, 1896.

Give date road commenced to be operated:  
 May 1, 1892.

Where built from and to.  
 Manistee, Mich., to Sec. 9, Town 19 Range 11 West, Lake Co., Mich.

Give exact number of miles:  
 44.71 miles.

### Number of bridges and trestles in Michigan.

	Number.	Aggregate Length, feet.
Wooden bridges.....	1	105
Combination bridges.....	2	56
Wooden trestles.....	1	75
<b>Total.....</b>	<b>4</b>	<b>236</b>

### Crossings.—Railroad and highway.

What railroads cross your road at grade in this State, and at what locality?  
 C. & W. M. R. R. at Canfield, Mich.  
 M. & L. R. R. at Sec. 14, T. 19 R. 12 West, Lake Co.  
 G. R. & I. R. R. at Sec. 13, T. 19 R. 12 West, Lake Co.

What railroads cross your road either over or under your grade in this State, and where?  
Under:

F. & P. M. R. R. at Junction near Stronach.

At what crossings are interlocking and derailing switches in operation?  
C. & W. M. crossing at Canfield, Mich.

What pattern or patterns have you adopted?  
The Union Switch & Signal Company's of Pittsburg, Pa.

Number of crossings of highways at grade in this State..... 32

#### Stations.

Number of stations on whole lines ..... 2

#### Employees.

Number of persons regularly employed on all roads operated by company, including officials 38

Classify your employees as per following list:

	Number.
Brakemen.....	4
Conductors.....	2
Engineers.....	2
Firemen.....	2
Laborers.....	20
Shopmen.....	4
Yardmen.....	2
Others.....	2

#### REPAIRS AND RENEWALS.

##### Fencing in Michigan.

How many miles of fencing have you:

Estimated 18 miles.

Give the number of miles required to complete fence both sides of your track in Michigan,  
and the counties in which needed:  
54.42 miles.

##### Road bed and track.

Number of track sections in Michigan.....	5
Average lengths of sections, miles.....	9
Average number of men in each section gang.....	4
Number of new ties put in whole line during the year.....	18,081
Number of new ties put in track in Michigan.....	170
Average number of new ties per mile of road.....	170

New bridges built during the year—number, 1.

Location.	Kind.	Material.	Month built.	feet in length.
Sec. 15, T. 19, R. 12, W., Little Manistee River, Lake Co.....	Trestle.....	Wood.....	August, 1896.....	75

#### ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender.....	2	\$15,284 40
Total.....	2	\$15,284 40
Number of box freight cars.....	4	\$1,826 80
Number of platform cars.....	90	\$1,310 40
Number of conductors' way cars.....	2	1,833 00
Total.....	96	\$30,251 40
Number of locomotive equipped with power brakes.....	2	
Number of freight cars equipped with power brakes.....	4	

What patterns of power brakes have you in use, and number of locomotive and cars with each?  
Westinghouse on locomotive.

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?  
Yes.

What pattern or patterns have you adopted for use?  
Janney.

## MILEAGE, TRAFFIC, ETC.

*Train mileage.*

	In Michigan.
Miles run by freight trains during the year .....	21,477
Total mileage of trains earning revenue .....	21,477

*Passenger traffic.—Road all in State of Michigan.*

	Numbers.	Miles.	Rate.
Number of local passengers carried, earning revenue .....	1,903		
Total number of passengers carried earning revenue .....	1,903		
Number of passengers carried one mile .....		45,676	
Average distance carried .....		24.0021	
Average amount received from each passenger .....			\$0 55
Average receipts per passenger per mile for all passengers .....			02.4
Estimated cost of carrying each passenger one mile, all passengers carried in cabooses as a matter of accommodation .....			02.4

*Freight traffic.—Road all in State of Michigan.*

	Tons.	Miles.	Rate.
Number of tons of local freight carried, earning revenue .....	64,275		
Total tons of freight carried, earning revenue .....	64,275		
Total mileage of through freight .....		21,477	
Total mileage of local freight .....			
Total freight mileage or tons carried one mile .....		1,636,984	
Average ton haul for through freight .....		254,677	
Average ton haul for local freight .....			
Average ton haul for all freight .....		254,677	
Average amount received for each ton haul .....			\$0 58
Average receipts ton per mile, for through freight .....			02.06
Average receipts ton per mile, for local freight .....			02.06
Average receipts ton per mile, for all freight .....			01.84
Estimated cost of carrying one ton one mile .....			

## FREIGHT TRAFFIC MOVEMENT.—ROAD ALL IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agricultural:</b>				
Grain.....	138	16	154	.24
Flour.....	17		17	.03
Other mill products.....	10		10	.02
Hay.....	45	31	76	.12
Tobacco.....	1		1	.00
Fruit and vegetables.....	6		6	.01
Potatoes.....	16		16	.02
<b>Products of animals:</b>				
Dressed meats.....	13		13	.02
Other packing house products.....	7		7	.01
<b>Products of mines:</b>				
Bituminous coal.....	32		32	.05
Stone, sand and other like articles.....	30		30	.05
Salt.....	170		170	.26
<b>Product of forest:</b>				
Lumber.....	299		299	.46
Logs, bark, posts and ties.....	59,563	3,734	63,297	98.43
Shingles.....	15		15	.02
<b>Manufactures:</b>				
Petroleum and other oils.....	3		3	.00
Sugar.....	6		6	.01
Iron and steel rails.....	1		1	.00
Wagons, carriages, tools, etc.....	4		4	.01
Household goods and furniture.....	5		5	.01
<b>Merchandise.....</b>	<b>36</b>		<b>36</b>	<b>.06</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	77		77	.12
<b>Total tonnage.....</b>	<b>60,494</b>	<b>3,781</b>	<b>64,275</b>	<b>100</b>

STATE OF MICHIGAN, } ss.  
COUNTY OF MANISTEE. }

John Canfield, president, and H. W. Marsh, assistant auditor of the Manistee & Grand Rapids Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

JOHN CANFIELD, *President.*H. W. MARSH, *Asst. Auditor.*

Subscribed and sworn to before me this 29th day of April, A. D. 1897.

[L. S.]

C. C. YOUNG,  
*Notary Public.*

ANNUAL REPORT  
OF THE  
MANISTEE & NORTHEASTERN RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed April 26, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, EDWARD BUCKLEY, Manistee, Mich.  
*Vice President*, WILLIAM DOUGLAS, Manistee, Mich.  
*Secretary (Acting)*, EDWARD BUCKLEY, Manistee, Mich.  
*Auditor*, ROBERT PORTEOUS, Manistee, Mich.  
*Treasurer (Acting)*, EDWARD BUCKLEY, Manistee, Mich.  
*General Manager*, EDWARD BUCKLEY, Manistee, Mich.  
*General Superintendent*, WILLIAM DOUGLAS, Manistee, Mich.  
*Assistant General Superintendent*, EDWARD McFADZEN, Manistee, Mich.  
*Chief Engineer*, J. J. HUBBELL, Manistee, Mich.  
*General Passenger Agent*, F. A. MITCHELL, Manistee, Mich.  
*General Freight Agent*, F. A. MITCHELL, Manistee, Mich.

DIRECTORS.

EDWARD BUCKLEY, Manistee, Mich.  
WILLIAM DOUGLASS, Manistee, Mich.  
CHARLES G. WILSON, Manistee, Mich.  
ALBERT WILSON, Manistee, Mich.  
T. J. ELTON, Manistee, Mich.

Terms expire January 7, 1897.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: January 7, 1887.  
Number of stockholders at date of last election: 7.  
Number of stockholders in Michigan at same date: 7.  
Date of annual meeting of stockholders: January 7th each year.  
Fiscal year of company ends December 31.  
General offices of the company are located at Manistee, Mich.

GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$301,375 03
Total expenses, included taxes.....	\$124,366 33	
Net income.....		\$77,018 70
Interest on unfunded debt.....	\$74,517 93	
Balance for the year (profit).....		2,500 75
Balance (profit and loss) last year.....	\$248,264 47	
Balance forward to next year.....		<u>252,130 42</u>

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association .....		\$2,000,000 00
Par value of shares .....	\$100 00	
Number of shares issued .....	20,000	
Amount paid in on common .....		\$525,765 97
Total amount paid in, as per books of the company .....		525,765 97
Paid in per mile of road owned by company, 90.50 miles .....		5,809 57

## ANALYSIS OF DEBT ACCOUNTS.

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For construction .....	To be paid .....	\$1,527,434 28
For equipment .....		
For real estate .....		
For renewals .....		
For miscellaneous .....		
For current balances .....		

## RECAPITULATION.

Total unfunded debt .....	\$1,527,434 28
Total debt liabilities .....	\$1,527,434 28
Amount of debt liabilities per mile of road, 90.50 miles .....	16,877 73
Total amount of stock and debt .....	2,053,200 25
Stock and debt per mile of road, 90.50 miles .....	22,687 29

## GENERAL BALANCE SHEET.—Dr.

Construction account .....	\$1,473,699 27
Equipment account .....	198,182 95
Other investments:	
Real estate, etc. ....	103,094 97
Manistee driving park stock .....	\$1,750 00
North Side park stock .....	250 00
	2,000 00
Cash items:	
Cash .....	\$27,236 15
Due from agents .....	5,479 88
	32,716 03
Other assets:	
Materials and supplies .....	10,263 75
Debit balances from companies and individuals .....	5,163 08
Balance .....	252,190 42
Total .....	\$2,077,250 42

## GENERAL BALANCE SHEET.—Cr.

Capital stock .....	\$525,765 97
Unfunded debt:	
Interest unpaid .....	\$1,537,434 28
Dividends unpaid .....	
Notes payable .....	
Vouchers and accounts .....	
	24,050 17
	1,551,484 45
Total .....	\$2,077,250 42

# MANISTEE & NORTHEASTERN RAILROAD COMPANY. 333

## COST OF ROAD AND EQUIPMENT.

Total cost for construction and equipment of road and branches built by company.

Total expended for construction and equipment.....	\$1,774,977 19
Average cost per mile of road (not including sidings), 90.50 miles.....	19,613 00
Proportion of cost for Michigan.....	19,613 00

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

	Extensions and new sidings.	New buildings.	New fences.	Machinery and tools.	Total.
Main line.....	\$110 06	\$308 85	\$103 91	\$449 72	\$972 54
Branches.....	2,798 97				
Sidings.....	2,189 12				4,986 09
Total charges.....	\$5,096 15	\$380 85	\$103 91	\$449 72	\$5,958 63

Total charges to property account as above.....	\$5,958 63
Net addition to property account.....	5,958 63

## ANALYSIS OF EARNINGS—ROAD ALL IN STATE OF MICHIGAN.

### PASSENGER EARNINGS.

Main line and branches:		
Local fares.....	\$32,500 43	
Through fares.....	5,976 84	
Total passenger fares.....	\$38,476 79	
Express and baggage.....	1,202 95	
Mails.....	4,418 34	
Total passenger department earnings.....		44,098 08
Per train mile.....	\$0 41	
Per mile of road.....	608 50	

### FREIGHT EARNINGS.

Main line and branches:		
Local traffic.....	145,379 05	
Through traffic.....	10,812 27	
Total traffic.....	\$156,191 32	
Total freight department earnings.....		156,191 32
Per train mile.....	\$1 73	
Per mile of road.....	1,725 87	

Total transportation earnings, entire line.....	\$200,289 40
Transportation earnings per mile of road, 90.50.....	2,213 14
Transportation earnings per train mile.....	1 01
Miscellaneous receipts from operating account, other than for transportation, as follows:	
From telegraph companies.....	819 38
From other sources, news agency and accident ins.....	266 25
Total.....	\$201,375 03
Total earnings from operation of road { 65.50 miles	185,889 77
25 north of parallel 44 of latitude	15,485 26
Total earnings per mile of road, 90.50 miles.....	2,225 14
Total earnings per train mile.....	1 01
Proportion of taxable earnings for Michigan.....	185,889 77
Total taxable earnings per mile of road in Michigan, 65.50.....	2,838 01

Total income from all sources.....	\$201,375 03
Proportion of income for Michigan.....	201,375 03

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway.....	\$19,749 28
Renewals of rails.....	25 75
Renewals of ties.....	6,677 10
Repairs and renewals of bridges and culverts.....	227 78
Repairs and renewals of fences, road crossings, signs and cattle guards.....	248 52
Repairs and renewals of buildings and fixtures.....	708 00
Repairs and renewals of telegraph.....	147 44
Stationery and printing.....	124 99
<b>Total.....</b>	<b>\$27,909 46</b>

## MAINTENANCE OF EQUIPMENT.

Superintendence.....	\$500 00
Repairs and renewals of locomotives.....	9,025 98
Repairs and renewals of passenger cars.....	1,953 83
Repairs and renewals of freight cars.....	4,785 63
Stationery and printing.....	125 00
Other expenses.....	58 02
<b>Total.....</b>	<b>\$16,428 46</b>

## CONDUCTING TRANSPORTATION.

Superintendence.....	\$1,620 00
Engine and roundhouse men.....	11,825 55
Fuel for locomotives.....	20,616 50
Water supply for locomotives.....	818 07
Oil, tallow and waste for locomotives.....	1,387 17
Train service.....	11,387 79
Train supplies and expenses.....	263 64
Switchmen, flagmen and watchmen.....	1,120 95
Telegraph expenses.....	2,338 35
Station service.....	9,545 49
Station supplies.....	876 85
Car mileage—balance.....	872 22
Loss and damage.....	32 70
Clearing wrecks.....	21 39
Stationery and printing.....	499 96
Other expenses.....	975 26
<b>Total.....</b>	<b>\$64,212 40</b>

## GENERAL EXPENSES.

Salaries of general officers.....	\$3,701 44
Salaries of clerks and attendants.....	2,723 12
Insurance.....	1,657 33
Law expenses.....	3,331 10
Stationery and printing (general offices).....	249 98
Other expenses.....	280 72
Taxes.....	3,863 32
<b>Total.....</b>	<b>\$15,806 01</b>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	22.44	\$27,909 46
Maintenance of equipment.....	13.22	16,428 46
Conducting transportation.....	51.63	64,212 40
General expenses, including taxes.....	12.71	15,806 01
<b>Total operating expenses and taxes.....</b>	<b>100.00</b>	<b>\$124,356 35</b>
Operating expenses and taxes per mile of road, 90.50 miles.....		\$1,374 10
Operating expenses and taxes per train mile run, for trains, earning revenue, 198,469 miles...		62
Proportion of operating expenses and taxes for Michigan, main line.....		124,356 33
<b>Total proportion of expenses for Michigan.....</b>		<b>\$124,356 33</b>
Percentage of expenses to earnings.....	61.8	
Net earnings per mile of road.....		\$51 08
Net earnings per train mile.....		88.80



## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Manistee, Mich., to Traverse City, Mich., July 1, 1892.

Line opened as follows:

Main Line—

Manistee, Mich., to Onkama, Mich., January 14, 1889.

Manistee, Mich., to Peters Camp, Mich., May 1, 1890.

Manistee, Mich., to Lake Ann, Mich., October 13, 1890.

Manistee, Mich., to Traverse City, Mich., July 1, 1892.

	Miles.	Miles
In Michigan, from Manistee to Traverse City.....	69.76	
In Michigan, from Manistee City to Tannery.....	1.00	
Total length completed .....		70.76

## BRANCHES.

From Manistee, Mich., to Harbor.....	1.51	
From Onkama Junction to Onkama.....	2.71	
From Bear Creek to Canfield's Camp.....	8.00	
From Maple Grove.....	4.00	
From Solon to Cedar City.....	3.52	
Total length of branches owned by company .....		19.74
Total length of road belonging to this company in Michigan.....		90.50
Aggregate length in Michigan of sidings, spurs and other tracks not above enumerated ...		21.00
Aggregate length of tracks in Michigan belonging to this company, computed as single track .....		111.50

Gauge of track, 4 feet 8½ inches.

If north of parallel 44 of latitude?

From Lake Ann, Mich., to Traverse City, Mich.

Give date road commenced to be built:

Oct. 1, 1891.

Give date road completed:

July 1, 1892.

Give date road commenced to be operated:

July 1, 1892.

Where built from and to:

From Lake Ann, Mich., to Traverse City, Mich.

Give exact number of miles:

17.86 miles.

## Number of bridges and trestles in Michigan.

Wooden bridges, number of, 14; aggregate length, 600 feet.

## Draw bridges in Michigan.

How many on your line?

One.

Where located, when built and length of draw span?

Manistee, Mich., January, 1889. Length of draw open 160 feet.

Character of structure?

Howe truss.

Material of which constructed.

Wood and iron.

Height above water, and depth of water under bridge.

12 feet; 14 feet.

How swung, by engine or hand power?

Hand power.

Approaches straight or curved?

Curved.

Do you require all trains to come to full stop before crossing a draw, and how are they signaled?

Yes. By Gravett derailing semaphore.

*Crossings.—Railroad and highway.*

What railroads cross your road at grade in this State, and at what locality?

Flint & Pere Marquette R. R. at Manistee, Mich.  
C. & W. M. R. R. at Manistee Crossing, Mich.  
Ann Arbor R. R. at Copemish, Mich.  
Chicago & W. M. R. R. at Interlochen, Mich.  
Chicago & W. M. R. R. at Bear Creek Br. Crossing, Mich..  
Chicago & W. M. R. R. at Traverse City, Mich.

At what crossings are interlocking and derailing switches in operation?

Flint & Pere Marquette R. R., Manistee, Mich.  
Chicago & W. M. R. R., Manistee Crossing, Mich.  
Chicago & W. M. R. R., Interlochen, Mich.  
Chicago & W. M. R. R., Bear Creek Br. Crossing, Mich.

What pattern or patterns have you adopted?

Gravett.

Number of crossings of highways at grade in this State.....	60
Number of crossings at which there are electric or automatic signals.....	1

Are your frogs and guard rails blocked as required by act 174, session laws 1883?

Yes.

How are they treated?

Mostly wood, some with steel.

*Stations.*

Number of stations on whole lines: 14 regular, and 7 flag stations.

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials	179
--------------------------------------------------------------------------------------------	-----

Classify your employees as per following list:

	Number.
Baggagemen .....	2
Brakemen .....	11
Conductors .....	7
Engineers .....	7
Firemen .....	7
Laborers .....	41
Shopmen .....	13
Yardmen .....	2
Others .....	89

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you?.....	61½
Give the number of miles required to complete fence both sides of your track in Michigan, and the counties in which needed:	

	Miles.
Manistee county.....	44½
Benzie county .....	11
Grand Traverse county.....	22
Leelanaw county .....	12
Total miles required .....	89

*Road bed and track.*

Number of track sections in Michigan.....	10
Average lengths of sections, miles.....	7
Average number of men in each section gang.....	4
Number of new ties put in whole line during the year.....	54,316
Number of new ties put in track in Michigan.....	54,316
Average number of new ties per mile of road.....	600

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender.....	8	\$43,670 52
Total.....	8	\$43,670 52
Number of passenger cars—8-wheel, including official cars.....	5	16,514 49
Number of express and baggage cars.....	2	2,973 31
Number of box freight cars.....	8	2,617 20
Number of platform cars.....	275	76,496 02
Number of conductors' way cars.....	5	2,085 86
Other cars.....	1	602 62
Total.....	296	\$144,959 02

# MANISTEE & NORTHEASTERN RAILROAD COMPANY. 337

Number of passenger-train cars equipped with power brakes..... 7  
Number of freight cars equipped with power brakes..... 1

What patterns of power brakes have you in use, and number of locomotives and cars with each?  
Westinghouse air brakes: 6.  
American steam brakes: 2.  
Box cars, Westinghouse air brakes: 1.  
Passenger cars, Westinghouse air brakes: 7.

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?  
Yes.

What pattern or patterns have you adopted for use?  
Dowling, M. C. B. and Gould. Draw head coupler.

How are your passenger cars heated.  
Combination Baker heater, with McElroy steam heat, Consolidated Heating Co's system.

## MILEAGE, TRAFFIC, ETC.

### ROAD ALL IN STATE OF MICHIGAN.

#### Train mileage.

	All in Michigan.
Miles run by passenger trains during the year.....	104,806
Miles run by freight trains during the year.....	87,111
Miles run by mixed trains.....	6,552
Total mileage of trains earning revenue.....	198,469
Five work trains.....	4,724
Grand total train mileage.....	203,193

#### Passenger traffic.

	Numbers.	Miles.	Rate.
Number of through passengers carried, earning revenue.....	8,163		
Number of local passengers carried earning revenue.....	66,467		
Total number of passengers carried, earning revenue.....	74,630		
Number of passengers carried one mile.....	1,730,876		
Average distance carried.....		23.2	
Average amount received from each passenger.....			\$0 51.5
Average receipts per mile for through passengers.....			02.2
Average receipts per mile for local passengers.....			02.2
Average receipts per passenger per mile for all passengers.....			02.2

#### Freight traffic.

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	16,115		
Number of tons of local freight carried, earning revenue.....	243,149		
Total tons of freight carried, earning revenue.....	259,264		
Total mileage of through freight.....		436,342	
Total mileage of local freight.....		8,116,218	
Total freight mileage or tons carried one mile.....		8,552,560	
Average ton haul for through freight.....		27	
Average ton haul for local freight.....		33.4	
Average ton haul for all freight.....		33.4	
Average amount received for each ton haul.....			\$0 80
Average receipts ton per mile, for through freight.....			02.5
Average receipts ton per mile, for local freight.....			01.8
Average receipts ton per mile, for all freight.....			01.8

## FREIGHT TRAFFIC MOVEMENT.—IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture :</b>				
Grain.....	692	651	1,343	.51
Flour.....	333	368	701	.27
Other mill products.....	114	348	462	.18
Hay.....	379	1,702	2,081	.80
Fruit and vegetables.....	1,199	34	1,233	.44
Potatoes.....	697	6	703	.27
<b>Products of animals :</b>				
Live stock.....	147	36	183	.07
Dressed meats.....	74	2	76	.03
Other packing house products.....	65	11	77	.03
Poultry, game and fish.....	171	120	291	.11
Wool.....	1		1	
Hides and leather.....	373	407	780	.30
<b>Products of mines :</b>				
Anthracite coal.....		135	135	.07
Bituminous coal.....	1,964	201	2,165	.86
Coke.....		33	33	.01
Orss.....	114	28	142	.05
Salt.....	3,904	1	3,905	1.57
<b>Products of forest :</b>				
Lumber.....	29,840	152	29,992	11.58
Logs.....	192,509	160	192,669	74.47
Shingles and lath.....	6,530	24	6,554	2.52
Bark.....	4,368	104	4,472	1.75
<b>Manufactures :</b>				
Petroleum and other oils.....	153	331	484	.19
Sugar.....	24	161	185	.07
Iron, pig and bloom.....		137	137	.07
Other castings and machinery.....	441	458	899	.30
Cement, brick, and lime.....	70	337	407	.16
Wagons, carriages, tools, etc.....	120	105	225	.09
Wines, liquors and beers.....	216	449	665	.25
Household goods and furniture.....	444	241	685	.25
Hames and hoops.....	1,292	1,367	2,659	1.02
<b>Merchandise.....</b>	<b>1,316</b>	<b>511</b>	<b>1,827</b>	<b>.70</b>
<b>Miscellaneous :</b>				
Other commodities not mentioned above.....	1,926	643	2,569	.99
<b>Total tonnage.....</b>	<b>249,777</b>	<b>9,356</b>	<b>259,133</b>	<b>100</b>

## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc. ; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Company.

A general transportation business on a pro rata basis as to rates.

Take their freight at the depot.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

Seventy-six miles. Manistee & North Eastern R. R. Co.

*[Fast freight lines.]*

To what fast freight lines or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

Name of company.	General office.	Amount paid.
Armour Car Lines.....	Chicago, Ill.....	\$30 00
American Refrigerator Transit Co.....	St. Louis, Mo.....	1 35
Burton Stock Car Co.....	Chicago, Ill.....	24
Blue Line.....	Rochester, N. Y.....	23 50
Commercial Despatch.....	Cleveland, O.....	38
Canada Southern Line.....	Rochester, N. Y.....	10 61
Chicago Refrigerator Line.....	Chicago, Ill.....	17 80
Canadian Pacific Despatch.....	Boston, Mass.....	80
California Fruit Transit Co.....	Chicago, Ill.....	60
Erie Despatch.....	Cleveland, O.....	38
Empire Line.....	Philadelphia, Pa.....	62
Great Eastern Line.....	Montreal, Can.....	70
International Fruit Dealers' D. L.....	Chicago, Ill.....	2 64
Merchants' Despatch Transportation Co.....	New York, N. Y.....	17 59
National Despatch Line.....	Boston, Mass.....	8 02
New York Despatch Line.....	Boston, Mass.....	71
North & South R. Stock Co.....	Springfield, Ill.....	75
Osborn Sagar Coal Tr. Co.....	Cleveland, Ohio.....	42
Red Line.....	Buffalo, N. Y.....	6 38
Southern Despatch Lumber Line.....	Louisville, Ky.....	2 64
Southern Iron Car line.....	Atlanta, Ga.....	37
Union Tank Line.....	Indianapolis, Ind.....	6 00
Union Refrigerator Transit Co.....	St. Louis, Mo.....	60
White Line.....	Buffalo, N. Y.....	1 92
Western Equipment Car Co.....	Indianapolis, Ind.....	48
Mather Stock Car Co.....	Chicago, Ill.....	1 08

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1906.

## INJURED.

March 2, Michael Doyle, Goodrich Crossing, Mich. Stepped off platform of rear coach when train was running at rate of 20 miles an hour. Was somewhat under the influence of liquor. Injury to head.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Falling from trains.....				1		
Total.....				1		

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons injured during the year .....	1
Number resulting from lack of caution, carelessness or misconduct.....	1
Persons killed or injured while intoxicated.....	1

STATE OF MICHIGAN, } ss.  
COUNTY OF MANISTEE, }

Edward Buckley, president and general manager, and Robert Porteous, auditor, of the Manistee & Northeastern Railroad Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF E. E.]

Signed,

EDWARD BUCKLEY, *President.*  
ROBERT PORTEOUS, *Auditor.*

Subscribed and sworn to before me this 16th day of April, A. D. 1897.

[L. S.]

D. O. ANDERSON,  
*Notary Public.*

ANNUAL REPORT  
OF THE  
MANISTEE & NORTHEASTERN RAILROAD COMPANY,  
(SUPPLEMENTARY)

*For the year ending December 31, 1896.*

[Filed April 26, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

The same as Manistee & Northeastern.

DIRECTORS.

The same as Manistee & Northeastern.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

See general report for Manistee & Northeastern.

ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

PASSENGER EARNINGS.		
Main line and branches:		
Local fares .....	\$7,088 86	
Through fares .....	750 09	
Total passenger fares .....	\$7,848 95	
Express and baggage .....	193 46	
Mails .....	1,186 14	
Total passenger department earnings .....		\$9,180 55
FREIGHT EARNINGS.		
Main line and branches:		
Local traffic .....	\$6,088 60	
Through traffic .....	266 11	
Total traffic .....	\$6,304 71	
Total freight department earnings .....		6,304 71
Total transportation earnings, entire line .....		\$15,485 26

DESCRIPTION OF ROAD.

If north of parallel 44 of latitude: Yes.  
Give date road commenced to be built: October 1, 1891.  
Give date road completed: July 1, 1892.  
Give date road commenced to be operated: July 1, 1892.  
Where built from and to: Lake Ann to Cedar City and Traverse City, Mich.  
Give exact number of miles: 25.

STATE OF MICHIGAN, } ss.  
COUNTY OF MANISTEE, }

Edward Buckley, president and general manager, and Robert Porteous, auditor, of the Manistee & Northeastern Railroad Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF E. R.]

Signed,

EDWARD BUCKLEY, *President.*  
ROBERT PORTEOUS, *Auditor.*

Subscribed and sworn to before me this 16th day of April, A. D. 1897.

[L. S.]

D. O. ANDERSON,  
*Notary Public.*

**ANNUAL REPORT**  
**OF THE**  
**MANISTIQUE RAILWAY COMPANY,**

*For the year ending December 31, 1896.*

[Filed February 24, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President, M. S. SMITH, Detroit, Mich.*  
*Vice President, LEWIS A. HALL, Bay Mills, Mich.*  
*Secretary, J. C. McCAUL, Detroit, Mich.*  
*Auditor, G. H. STALKER, Detroit, Mich.*  
*Treasurer, J. C. McCAUL, Detroit, Mich.*  
*General Superintendent, JOHN MILLEN, Black River, Mich.*  
*Assistant General Superintendent, WM. GREEN, Grand Marais, Mich.*  
*General Passenger Agent, J. F. CHISHOLM, Grand Marais, Mich.*

**DIRECTORS.**

*R. A. ALGER, Detroit, Mich.*  
*M. S. SMITH, Detroit, Mich.*  
*J. C. McCAUL, Detroit, Mich.*  
*LEWIS A. HALL, Bay Mills, Mich.*  
*R. K. HAWLEY, New York, N. Y.*  
*G. H. STALKER, Detroit, Mich.*

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: September 18, 1886. Articles amended October 21, 1889.  
 Number of stockholders: 9.  
 Number of stockholders in Michigan at same date: 7.  
 Amount of full paid stock held in Michigan at same date. \$114,800.00.  
 Date of annual meeting of stockholders: Not fixed.  
 Fiscal year of company ends December 31.  
 General offices of the company are located at Detroit, Mich.

**GENERAL EXHIBIT.**

	Debit.	Credit.
Total earnings from operation .....		\$116,713 28
Total expenses, including taxes .....	\$78,844 58	
Net income .....		\$42,868 70
Interest on unfunded debt .....	5,414 56	
Balance applicable to dividends .....		\$37,454 14
Balance for the year .....		\$37,454 14
Balance (profit and loss) last year .....		207,955 60
Balance forward to next year .....		\$245,409 74



## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$300,000 00
Par value of shares.....	\$100	
No. of shares issued.....	1,500	
Amount paid in on common.....	\$150,000 00	
Total amount paid in, as per books of the company.....		150,000 00
Paid in per mile of road owned by company (59.50 miles).....		2,521 01

## ANALYSIS OF DEBT ACCOUNTS.

## UNFUNDED DEBT.

Total unfunded debt.....	\$88,493 38
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## RECAPITULATION.

Total unfunded debt ..	\$88,493 38
Total debt liabilities.....	\$88,493 38
Amount of debt liabilities per mile of road, 59.50 miles.....	1,487 23
Total amount of stock and debt.....	238,493 38
Stock and debt per mile of road, 59.50 miles.....	4,008 29

## GENERAL BALANCE SHEET.—Dr.

Construction account.....	\$393,873 62
Equipment account.....	75,349 21
Cash items:	
Cash.....	\$1,214 29
Other assets:	
Materials and supplies.....	\$11,466 00
Total.....	\$483,908 12

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$150,000 00
Unfunded debt:	
Notes payable.....	41,082 42
Vouchers and accounts.....	47,460 96
Profit and loss or income accounts.....	245,408 74
Total.....	\$483,908 12

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company*

Total expended for construction and equipment.....	\$471,232 63
Average cost per mile of road (not including sidings) 59.50 miles.....	7,919 71

## ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

Main line and branches:	
Local fares.....	\$9,244 99
Total passenger fares.....	\$9,244 99
Mails.....	1,753 16
Total passenger department earnings.....	\$10,998 15
Per mile of road.....	\$184 84

## FREIGHT EARNINGS.

Main line and branches:	
Local traffic .....	\$105,565 13
Total freight department earnings .....	\$105,565 13
Per mile of road .....	\$1,774 20
Total transportation earnings, entire line .....	\$116,563 28
Transportation earnings per mile of road .....	\$1,959 04
Transportation earnings per train mile .....	1 81
Miscellaneous receipts from operating accounts, other than for transportation, as follows:	
From rents not otherwise provided for .....	\$150 00
Total .....	\$116,713 28
Total earnings from operation of road .....	\$116,713 28
Total earnings per mile of road .....	\$1,961 57
Total earnings per train mile .....	1 82
Proportion of taxable earnings for Michigan .....	116,713 28
Total taxable earnings per mile of road in Michigan .....	1,961 57
Total income from all sources .....	116,713 28
Proportion of income for Michigan .....	116,713 28

## ANALYSIS OF EXPENSES.

Maintenance of ways and structures .....	\$23,706 99
Maintenance of equipment .....	\$13,131 50
Conducting transportation .....	\$34,072 11

## GENERAL EXPENSES.

Insurance .....	\$150 50
Stationery and printing (general offices) .....	44 69
Other expenses .....	394 23
Taxes .....	2,844 56
Total .....	\$2,933 98

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures .....	32.10	\$23,706 99
Maintenance of equipment .....	17.79	13,131 50
Conducting transportation .....	46.14	34,072 11
General expenses, including taxes .....	8.97	2,933 98
Total operating expenses and taxes .....	100	\$73,844 58
Operating expenses and taxes per mile of road .....		\$1,241 09
Operating expenses and taxes per train mile run, for trains, earning revenue, 64,180 miles .....		1 15
Percentage of expenses to earnings .....	.63	
Net earnings per mile of road .....		720 48
Net earnings per train mile .....		67

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Germfask to Grand Marais, October 15, 1893.

## MAIN LINE.

	Miles.	Miles.
In Michigan, from Germfask to Grand Marais .....		39.50
Total length completed .....		39.50

# MANISTIQUE RAILWAY COMPANY.

345

## BRANCHES.

From Grand Marais Junction to Hall & Buell Camp .....	18	
From Main Line to Starr .....	4	
Total length of branches owned by company .....		20
Total length of branches owned by company in Michigan .....	20	
Total length of road belonging to this company .....		59.50
Total length of road belonging to this company in Michigan .....	59.50	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated .....	8	
Aggregate length of tracks in Michigan belonging to this company, computed as single track .....		67.50

Gauge of track, 4 feet 8½ inches.

## Number of bridges and trestles in Michigan.

	Number.	Aggregate Length, feet.
Wooden bridges .....	2	225
Combination bridges .....	1	300
Total .....	3	525

## Crossings.—Railroad and highway.

What railroads cross your road at grade in this State, and at what locality?  
D. S. S. & A. R. R. at Seney.

At what crossings are interlocking and derailing switches in operation?  
Seney.

What pattern or patterns have you adopted?  
Gravit.

Number of crossings or highways at grade in this State .....	4
Number of crossings of highways at grade in this State at which there are gates or flag- men .....	1

Are your frogs and guard rails blocked as required by Session Laws of 1883?  
Yes.

How are they treated?  
Bolted and blocked with two inch plank.

## Stations.

Number of stations on whole lines .....	4
Same in Michigan .....	4

## Employees.

Number of persons regularly employed on all roads operated by company, including officials (all in Michigan) .....	30
-----------------------------------------------------------------------------------------------------------------------	----

Classify your employée as per following list:

	Number.
Baggagemen .....	1
Brakemen .....	6
Conductors .....	3
Engineers .....	3
Firemen .....	3
Laborers .....	1
Shopmen .....	10
Yardmen .....	1
Others .....	1

## REPAIRS AND RENEWALS.

### Road bed and track.

Number of track sections in Michigan .....	6
Average length of sections (miles) .....	9.92
Average number of men in each section gang .....	4
Number of new ties put in whole line during the year .....	30,000
Number of new ties put in track in Michigan .....	30,000
Average number of new ties per mile of road .....	505

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender .....	3	\$22,636 48
Total.....	3	\$22,636 48
Number of passenger cars and baggage combination—8-wheel, including official cars.....	1	\$3,100
Number of box freight cars.....	1	450
Number of platform cars.....	95	33,593 43
Number of conductors' way cars.....	3	1,627 00
Other cars as follows:		
Log cars.....	40	8,420 75
Total.....	140	\$47,191 18
Number of locomotives equipped with power brakes .....		3
Number of passenger train cars equipped with power brakes .....		1

What patterns of power brakes have you in use, and number of locomotives and cars with each?  
 American on locomotives. Westinghouse on passenger car.

## MILEAGE, TRAFFIC, ETC.

*Train mileage.*

	In Michigan.
Miles run by freight trains during the year.....	39,530
Miles run by mixed trains.....	24,600
Total mileage of trains earning revenue.....	64,130

*Passenger traffic.—In State of Michigan.*

	Numbers.	Miles.	Rate.
Number of local passengers carried, earning revenue.....	11,500		
Total number of passengers carried, earning revenue.....	11,500		
Number of passengers carried one mile.....	230,000		
Average distance carried.....		20	
Average amount received from each passenger.....			\$0 80
Average receipts per mile for local passengers.....			04
Average receipts per passenger per mile for all passengers.....			04

*Freight traffic.—In State of Michigan.*

	Tons.	Miles.	Rate.
Number of tons of local freight carried, earning revenue.....	183,895		
Total tons of freight carried, earning revenue.....	183,895		
Total mileage of local freight.....		64,130	
Total freight mileage or tons carried one mile.....		5,026,585	
Average ton haul for local freight.....		26.61	
Average ton haul for all freight.....		26.61	
Average amount received for each ton haul.....			\$0 00.559
Average receipts ton per mile, for local freight.....			.021
Average receipts ton per mile, for all freight.....			.021

## FREIGHT TRAFFIC MOVEMENT.—ROAD ALL IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
Products of forest:				
Logs.....	184,123		184,123	97.47
Shingles.....	500		500	.23
Merchandise: Lumbermen's supplies.....	4,272		4,272	2.27
Total tonnage.....	188,895		188,895	100.00

STATE OF MICHIGAN, } ss.  
COUNTY OF WAYNE, }

M. S. Smith, president, and J. C. McCaul, secretary, of the Manistique Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

M. S. SMITH,  
J. C. McCAUL.

Subscribed and sworn to before me this 23d day of February, A. D. 1897.

[L. S.]

G. H. STALKER,  
Notary Public.

ANNUAL REPORT  
OF THE  
MANISTIQUE & NORTHWESTERN RAILWAY COMPANY,

*For the year ending December 31, 1896.*

[Filed March 31, 1897.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, WILLIAM H. HILL, Manistique, Mich.  
*Vice President*, ROBERT M. CHERRIE, Chicago, Ill.  
*Secretary and Treasurer*, J. D. MERSEBEAU, Manistique, Mich.  
*General Manager*, WILLIAM H. HILL, Manistique, Mich.  
*Superintendent*, JOHN A. ROBINSON, Manistique, Mich.

DIRECTORS.

ROBERT M. CHERRIE, Chicago, Ill.  
ABRAHAM WESTON, Painted Post, N. Y.  
WILLIAM H. HILL, Manistique, Mich.  
GEO. H. ORR, Manistique, Mich.  
MARTIN H. QUIRK, Manistique, Mich.  
JOHN D. MERSEBEAU, Manistique, Mich.  
HENRY DUVAL, Manistique, Mich.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered: April 25, 1891.  
Number of stockholders at date of last election: 7.  
Number of stockholders in Michigan at same date: 5.  
Amount of full paid stock at same date: \$740.00.  
Date of annual meeting of stockholders: First Monday in September.  
Fiscal year of company ends December 31.  
General offices of the company are located at Manistique, Mich.

REMARKS.

The Manistique & Northwestern Railway Co. was surveyed in 1892-'93, Manistique, Michigan, to Negaunee, Michigan (about 80 miles). About 21 miles of grading was done in 1895 and 1896, 11 miles of rail has been laid and ballasting will be done the coming year. The stockholders have advanced the necessary funds for construction expense.

REPORT FOR THE YEAR ENDING DECEMBER 31, 1896.

Total expenses including taxes .....	\$82,099 42
Interest on current accounts .....	2,800 00
Balance forward to next year .....	<u>1,619 91</u>

ANALYSIS OF CAPITAL STOCK.

Authorized by charter .....		\$1,600,000 00
Par value of shares .....	\$100.00	
Number of shares issued .....	1,050	<u>\$105,000 00</u>
Total amount paid in as per books of the company, 1,050 shares .....		<u>105,000 00</u>

# MANISTIQUE & NORTHWESTERN RAILWAY COMPANY. 349

## ANALYSIS OF DEBT ACCOUNT.

Unfunded debt for current balances.....	\$1,619 91
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## GENERAL BALANCE SHEET.—Dr.

Construction account, 1896.....	\$80,421 21
Equipment account, 1896.....	51,678 21
Interest account, 1896.....	2,800 00
Construction and equipment expense for 1895.....	21,720 49
Total.....	\$106,619 91

## GENERAL BALANCE SHEET.—Cr.

Capital stock paid in.....	\$105,000 00
Unfunded debt current accounts.....	1,619 91
Total.....	\$106,619 91

## DESCRIPTION OF ROAD.

North of parallel 44 of latitude.  
 Claiming exemption from taxation under Act 174, Session Laws of 1891.  
 Commenced to build road, Sept., 1895.

## ROLLING STOCK.

One locomotive, 20 to 30 tons weight.....	\$4,000 00
One locomotive, 10 to 20 tons weight.....	1,500 00
Thirty platform cars.....	3,000 00
Thirty logging cars.....	2,250 00
Three boarding cars.....	300 00
Total.....	\$11,050 00

STATE OF MICHIGAN, }  
 COUNTY OF SCHOOLCRAFT, } ss.

Martin H. Quick and George H. Orr, directors of the Manistique & Northwestern Railway Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. E.]

Signed,

MARTIN H. QUICK,  
 GEORGE H. ORR.

Subscribed and sworn to before me this 29th day of March, A. D. 1897.  
 [L. S.]

CARRY W. DUNTON,  
 Notary Public.

ANNUAL REPORT  
OF THE  
MASON & OCEANA RAILROAD COMPANY.

*For the year ending December 31, 1896.*

[Filed January 18, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, M. F. BUTTERS, Ludington, Mich.  
*Vice President*, R. G. PETERS, Manistee, Mich.  
*Secretary*, M. F. BUTTERS, Ludington, Mich.  
*Treasurer*, HORACE BUTTERS, Ludington, Mich.  
*General Superintendent*, M. McDERMOTT, Ludington, Mich.  
*Chief Engineer*, OTTO WEEGE, Ludington, Mich.

DIRECTORS.

M. F. BUTTERS, Ludington, Mich.  
R. G. PETERS, Manistee, Mich.  
J. H. LYONS, Ludington, Mich.  
H. BUTTERS, Ludington, Mich.  
G. N. STRAY, Ludington, Mich.  
Term expires January 9, 1898.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: August 9, 1886.  
Number of stockholders at date of last election: 7.  
Number of stockholders in Michigan at same date: 5.  
Amount of full paid stock held in Michigan at same date: \$150,000.00.  
Date of annual meeting of stockholders: Second Monday in January.  
Fiscal year of company ends: December 31.  
General offices of the company are located at Ludington, Mich.

GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$14,346 81
Total expenses, including taxes.....	\$14,346 81	

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$150,000 00
Par value of shares.....	\$100 00	
Number of shares issued.....	1,500	
Amount paid in on common.....	150,000 00	
Total amount paid in, as per books of the company.....		150,000 00
Paid in per mile of road owned by company.....		5,555 55

UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated.	Amount.
For renewals.....		\$50,000 00
Total unfunded debt.....		\$50,000 00



## RECAPITULATION.

Total unfunded debt.....	\$50,000 00
Total debt liabilities .....	\$50,000 00
Amount of debt liabilities per mile of road, 27 miles .....	1,851 85
Stock and debt per mile of road, 27 miles.....	7,407 50

## GENERAL BALANCE SHEET.—Dr.

Construction account.....	\$145,000 00	
Equipment account.....	50,000 00	\$195,000 00
Other assets:		
Materials and supplies.....	\$5,000 00	5,000 00
Total.....		\$200,000 00

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$150,000 00
Other liabilities.....	50,000 00
Total.....	\$200,000 00

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction and equipment.....	\$195,000 00
Average cost per mile of road (not including sidings), 27 miles.....	7,222 22
Proportion of cost for Michigan.....	7,222 22

## PASSENGER EARNINGS.

Main line and branches:	
Local fares.....	\$1,652 51
Total passenger fares.....	\$1,652 51
Mails.....	1,256 20
Total passenger department earnings .....	\$2,908 71
Per train mile .....	\$0 17
Per mile of road.....	107 73

## FREIGHT EARNINGS.

Main line and branches:	
Local traffic.....	\$11,438 10
Total traffic.....	\$11,438 10
Total freight department earnings .....	11,438 10
Per train mile .....	\$0 88
Per mile of road.....	428 64
Total transportation earnings, entire lines.....	\$14,346 81
Transportation earnings per mile of road.....	531 36
Transportation earnings per train mile.....	46
Proportion of taxable earnings for Michigan.....	14,346 81
Total taxable earnings per mile of road in Michigan.....	531 36
Total income from all sources.....	\$14,346 81
Proportion of income for Michigan .....	14,346 81

ANNUAL REPORT  
OF THE  
MASON & OCEANA RAILROAD COMPANY.

*For the year ending December 31, 1896.*

[Filed January 18, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, M. F. BUTTERS, Ludington, Mich.  
*Vice President*, R. G. PETERS, Manistee, Mich.  
*Secretary*, M. F. BUTTERS, Ludington, Mich.  
*Treasurer*, HORACE BUTTERS, Ludington, Mich.  
*General Superintendent*, M. McDERMOTT, Ludington, Mich.  
*Chief Engineer*, OTTO WEEGE, Ludington, Mich.

DIRECTORS.

M. F. BUTTERS, Ludington, Mich.  
R. G. PETERS, Manistee, Mich.  
J. H. LYONS, Ludington, Mich.  
H. BUTTERS, Ludington, Mich.  
G. N. STRAY, Ludington, Mich.  
Term expires January 9, 1898.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: August 9, 1896.  
Number of stockholders at date of last election: 7.  
Number of stockholders in Michigan at same date: 5.  
Amount of full paid stock held in Michigan at same date: \$150,000.00.  
Date of annual meeting of stockholders: Second Monday in January.  
Fiscal year of company ends: December 31.  
General offices of the company are located at Ludington, Mich.

GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$14,346 81
Total expenses, including taxes.....	\$14,346 81	

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$150,000 00
Par value of shares.....	\$100 00	
Number of shares issued.....	1,500	
Amount paid in on common.....	150,000 00	
Total amount paid in, as per books of the company.....		150,000 00
Paid in per mile of road owned by company.....		5,555 55

UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated.	Amount.
For renewals.....		\$50,000 00
Total unfunded debt.....		\$50,000 00

## RECAPITULATION.

Total unfunded debt.....	\$50,000 00
Total debt liabilities .....	\$50,000 00
Amount of debt liabilities per mile of road, 27 miles .....	1,851 85
Stock and debt per mile of road, 27 miles.....	7,407 50

## GENERAL BALANCE SHEET.—Dr.

Construction account.....	\$145,000 00	
Equipment account.....	50,000 00	\$195,000 00
Other assets:		
Materials and supplies.....	\$5,000 00	5,000 00
Total.....		\$200,000 00

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$150,000 00
Other liabilities.....	50,000 00
Total.....	\$200,000 00

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction and equipment.....	\$195,000 00
Average cost per mile of road (not including sidings), 27 miles.....	7,222 23
Proportion of cost for Michigan.....	7,222 23

## PASSENGER EARNINGS.

Main line and branches:	
Local fares.....	\$1,652 51
Total passenger fares.....	\$1,652 51
Mails.....	1,256 20
Total passenger department earnings .....	\$2,908 71
Per train mile .....	\$0 17
Per mile of road.....	107 73

## FREIGHT EARNINGS.

Main line and branches:	
Local traffic.....	\$11,438 10
Total traffic.....	\$11,438 10
Total freight department earnings .....	11,438 10
Per train mile .....	\$0 88
Per mile of road.....	423 64
Total transportation earnings, entire lines.....	\$14,846 81
Transportation earnings per mile of road.....	531 36
Transportation earnings per train mile.....	46
Proportion of taxable earnings for Michigan.....	14,846 81
Total taxable earnings per mile of road in Michigan.....	531 36
Total income from all sources.....	\$14,846 81
Proportion of income for Michigan .....	14,846 81

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway.....	\$1,000 00
Renewals of ties.....	500 00
Repairs and renewals of bridges and culverts.....	100 00
Repairs and renewals of fences, road crossings, signs and cattle guards.....	100 00
Total.....	<u>\$1,700 00</u>

## MAINTENANCE OF EQUIPMENT.

Repairs and renewals of locomotives.....	\$3,000 00
Repairs and renewals of work cars.....	500 00
Repairs and renewals of shop machinery and tools.....	100 00
Total.....	<u>\$3,600 00</u>

## CONDUCTING TRANSPORTATION.

Engine and roundhouse men.....	\$2,000 00
Fuel for locomotives.....	2,000 00
Water supply for locomotives.....	200 00
Oil, tallow and waste for locomotives.....	200 00
Other supplies for locomotives.....	100 00
Train service.....	3,820 00
Train supplies and expenses.....	50 00
Switchmen, flagmen and watchmen.....	200 00
Telegraph expenses.....	50 00
Loss and damage.....	30 00
Stationery and printing.....	20 00
Other expenses.....	2 89
Total.....	<u>\$8,672 89</u>

## GENERAL EXPENSES.

Taxes.....	\$373 92
Total.....	<u>\$373 92</u>

## RECAPITULATION OF EXPENSES.

Maintenance of way and structures.....	\$1,700 00
Maintenance of equipment.....	3,600 00
Conducting transportation.....	8,672 89
General expenses, including taxes.....	373 92
Total operating expenses and taxes.....	<u>\$14,346 81</u>
Operating expenses and taxes per mile of road.....	\$331 36
Proportion of operating expenses and taxes for Michigan.....	14,346 81
Percentage of expenses to earnings.....	<u>100</u>

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
January 20, 1888.

## MAIN LINE.

	Miles.	Miles.
In Michigan, from Buttersville to Stetson.....		27.00
Total length completed.....		<u>27.00</u>

## BRANCHES.

Total length of branches owned by company.....	10
Total length of branches owned by company in Michigan.....	10
Total length of road belonging to this company in Michigan.....	<u>37</u>
Aggregate length of tracks in Michigan belonging to this company, computed as single track.....	<u>37</u>
Gauge of track, 3 feet.	

# MASON & OCEANA RAILROAD COMPANY.

353

## Number of bridges and trestles in Michigan.

	Number.	Aggregate length, feet.
Wooden bridges .....	3	450
Total .....	3	450

## Crossings.—Railroad and Highway.

Number of crossings of highways at grade in this State .....	11
--------------------------------------------------------------	----

## Stations.

Number of stations on whole lines .....	6
Same in Michigan .....	6

## Employees.

Number of persons regularly employed on all roads operated by company, including officials	30
Same in Michigan .....	30

## Classify your employees as per following list:

	Number.
Brakemen .....	5
Conductors .....	1
Engineers .....	4
Firemen .....	4
Laborers .....	18
Shopmen .....	2
Yardmen .....	1

## REPAIRS AND RENEWALS.

### Fencing in Michigan.

How many miles of fencing have you? .....	20
Give the number of miles required to complete fence both sides of your track in Michigan, and the counties in which needed .....	7

### Road bed and track.

Number of track sections in Michigan .....	4
Average length of sections (miles) .....	7
Average number of men in each section gang .....	4
Number of new ties put in whole line during the year .....	9,000
Number of new ties put in track in Michigan .....	9,000
Average number of new ties per mile of road .....	333

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender .....	2	\$8,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender .....	3	10,000 00
Number of locomotives of 10 to 20 tons weight, exclusive of tender .....	2	2,000 00
Total .....	7	\$18,000 00
Number of passenger cars—8 wheel, including official cars .....	1	\$500 00
Number of express and baggage cars .....	1	300 00
Number of box freight cars .....	1	100 00
Number of platform cars .....	60	6,000 00
Number of ore cars .....	175	25,000 00
Number of conductors' way cars .....	5	100 00
Total .....	250	\$50,000 00

What patterns of power brakes have you in use, and number of locomotives and cars with each?  
Ratchet, hand and chain wheel.

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?  
No.

What pattern or patterns have you adopted for use?  
Link and pin.

How are your passenger cars heated.  
Coal heater.

## MILEAGE TRAFFIC, ETC.

*Train mileage.*

	In Michigan.
Miles run by passenger trains during the year.....	17,000
Miles run by freight trains during the year.....	13,000
Total mileage of trains earning revenue.....	<u>30,000</u>

*Passenger traffic.—In State of Michigan.*

	Numbers.	Miles.	Rate.
Number of local passengers carried, earning revenue.....	4,131		
Total number of passengers carried, earning revenue.....	4,131		
Number of passengers carried one mile.....	70,227		
Average distance carried.....		14	
Average amount received from each passenger.....			\$0 40
Average receipts per mile for local passengers.....			03
Average receipts per passenger per mile for all passengers.....			03
Estimated cost of carrying each passenger one mile.....			<u>03</u>

*Freight traffic.—In State of Michigan.*

	Tons.	Miles.	Rate.
Number of tons of local freight carried, earning revenue.....	22,876		
Total tons of freight carried, earning revenue.....	22,876		
Total mileage of local freight.....		13,000	
Total freight mileage or tons carried one mile.....		297,388	
Average ton haul for through freight.....		100	
Average ton haul for local freight.....		100	
Average ton haul for all freight.....		100	
Average amount received for each ton haul.....			\$0 50
Average receipts ton per mile for through freight.....			02
Average receipts ton per mile for local freight.....			02
Average receipts ton per mile for all freight.....			02
Estimated cost of carrying one ton one mile.....			<u>02</u>

## FREIGHT TRAFFIC MOVEMENT.—IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	200		200	
Flour.....	40		40	
Other mill products.....	40		40	
Hay.....	50		50	
Potatoes.....	20		20	
<b>Products of animals:</b>				
Live stock.....	10		10	
Dressed meats.....	20		20	
Other packing house products.....	20		20	
Poultry, game and fish.....	10		10	
<b>Products of forest:</b>				
Lumber.....	300		300	
Logs.....	21,821		21,821	
Shingles.....	100		100	
<b>Manufactures:</b>				
Petroleum and other oils.....	5		5	
Sugar.....	15		15	
Iron, pig and bloom.....	5		5	
Iron and steel rails.....	10		10	
Wagons, carriages, tools, etc.....	5		5	
Household goods and furniture.....	5		5	
<b>Merchandise.....</b>	<b>200</b>		<b>200</b>	
<b>Total tonnage.....</b>	<b>22,876</b>		<b>22,876</b>	

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
20 miles.

STATE OF MICHIGAN, } ss.  
COUNTY OF MASON, }

M. F. Butters, president of the Mason & Oceana Railroad Company, being duly sworn deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declares them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of his knowledge and belief.

[L. S. of R. R.]

Signed,

M. F. BUTTERS, *President.*

Subscribed and sworn to before me this 11th day of January, A. D. 1897.

[L. S.]

GEO. N. STRAY,  
*Notary Public, Mason Co., Mich.*

**ANNUAL REPORT**  
**OF THE**  
**MICHIGAN AIR LINE RAILWAY COMPANY.**

*For the year ending December 31, 1896.*

[Filed April 2, 1897.]

**OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.**

*President, CHAS. M. HAYS, Montreal.*  
*Secretary and Treasurer, CHAS. PERCY, Montreal.*  
*Accountant, J. H. Muir, Detroit.*  
*General Manager, CHAS. M. HAYS, Montreal.*  
*Superintendent, A. B. ATWATER, Detroit.*  
*Engineer, GEO. MASSON, Detroit.*  
*General Traffic Manager, GEO. B. REEVE, Montreal.*  
*General Passenger and Ticket Agent, W. E. DAVIS, Montreal.*  
*Assistant General Passenger and Ticket Agent, E. H. HUGHES, Chicago.*  
*General Freight Agent, J. W. LOUD, Montreal.*  
*First Assistant General Freight Agent, DAVID BROWN, Chicago.*  
*Attorney, E. W. MEDDAUGH, Detroit.*

**DIRECTORS.**

*CHAS. M. HAYS, Montreal, Quebec.*  
*JOHN BELL, Belleville, Ontario.*  
*E. W. MEDDAUGH, Detroit, Mich.*  
*W. J. SPICER, Detroit, Mich.*  
*J. H. MUIR, Detroit, Mich.*  
*Terms expire September, 1897.*

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

*When chartered or articles of association filed: November 18, 1875.*  
*Number of stockholders at date of last election: 7.*  
*Number of stockholders in Michigan at same date: 3.*  
*Amount of full paid stock held in Michigan at same date: \$1,500.00.*  
*Date of annual meeting of stockholders: Last Wednesday in September.*  
*Fiscal year of company ends December 31.*  
*General offices of the company are located at Detroit, Mich.*

**GENERAL EXHIBIT.**

	Debit.	Credit.
Total earnings from operation .....		\$148,441 11
Total expenses, including taxes .....		141,052 92
Net income .....		\$7,388 19
Interest on funded debt .....	\$75,433 34	
Balance for the year, deficit .....	\$68,045 15	
Items not included in above, as follows:		
Rents .....		94 00
Contribution from Grand Trunk Ry towards interest liabilities, deficit .....	67,951 15	



ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$1,500,000 00
Par value of shares.....		\$100 00
Number of shares issued.....	3,000	
Amount paid in on common.....		300,000 00
Total amount paid in, as per books of the company.....		300,000 00
Paid in per mile of road owned by company, 105.60 miles.....		2,840 91

ANALYSIS OF DEBT ACCOUNTS

FUNDED DEBT.

Class, character and date of issue.	Rate of Interest.	When due.	Where payable.	Amount outstanding.
First mortgage, Jan., 1882.....	5%	Jan., 1902.....	London, Eng. ....	\$1,508,666 67
Total funded debt.....				\$1,508,666 67

UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For current balances.....		\$47,463 68

RECAPITULATION.

Total funded debt.....	\$1,508,666 67
Total unfunded debt.....	47,463 68
Total debt liabilities.....	\$1,556,130 35
Amount of debt liabilities per mile of road, 105.60 miles.....	14,736 08
Total amount of stock and debt.....	1,856,190 35
Stock and debt per mile of road, 105.60 miles.....	17,576 99

GENERAL BALANCE SHEET.—Dr.

Construction account.....	}	\$1,818,097 33
Equipment account.....		
Other assets:		
Debit balances from companies and individuals.....		38,033 02
Total.....		\$1,856,130 35

GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$300,000 00
Funded debt.....	1,508,666 67
Unfunded debt:	
Interest unpaid.....	\$37,716 67
Vouchers and accounts.....	9,747 01
Profit and loss or income accounts.....	47,463 68
Total.....	\$1,856,130 35

## COST OF ROAD AND EQUIPMENT.

## PURCHASED BY PRESENT COMPANY.

When purchased: November, 1875.	
Original cost to present company, of road and equipment.....	\$300,000 00
Amount expended since purchase, account of construction.....	1,517,097 33
Amount expended since purchase, account of equipment.....	1,000 00
Total cost to date of report.....	\$1,818,097 33
Average cost per mile of road (not including sidings), 105.60 miles.....	17,216 83
Proportion of cost for Michigan.....	17,216 83

## ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

Main line and branches:		
Local fares.....	\$30,435 89	
Through fares.....	58 02	
Total passenger fares.....	\$30,493 91	
Express and baggage.....	2,490 96	
Mails.....	8,338 00	
Total passenger department earnings.....		\$41,331 87
Per train mile.....	\$0 53	
Per mile of road.....	391 40	

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic.....	96,903 05	
Through traffic.....	9,206 19	
Total freight department earnings.....		106,109 24
Per train mile.....	\$0 91	
Per mile of road.....	1,004 82	
Total transportation earnings, entire line.....		\$147,441 11
Transportation earnings per mile of road.....	1,396 22	
Transportation earnings per train mile.....	75	
Miscellaneous receipts from operating account, other than for transportation, as follows:		
From rent of tracks, yards and terminals.....	\$1,000 00	
Total.....		148,441 11
Total earnings from operation of road.....		\$148,441 11
Total earnings per mile of road.....	1,405 69	
Total earnings per train mile.....	75	
Income other than from earnings.....	94 00	
Total income from all sources.....		\$149,535 11

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway.....	\$23,739 77
Renewals of rails.....	1,871 86
Renewals of ties.....	12,358 82
Repairs and renewals of bridges and culverts.....	12,239 35
Repairs and renewals of fences, road crossings, signs and cattle guards.....	2,223 13
Repairs and renewals of buildings and fixtures.....	2,218 64
Total.....	\$54,652 07

## MAINTENANCE OF EQUIPMENT.

Superintendence.....	\$23 60
Repairs and renewals of locomotives.....	2,563 17
Repairs and renewals of passenger cars.....	3,055 64
Repairs and renewals of freight cars.....	4,068 46
Repairs and renewals of work cars.....	722 50
Repairs and renewals of shop machinery and tools.....	654 24
Stationery and printing.....	39 20
Other expenses.....	83
Total.....	\$11,127 64

## CONDUCTING TRANSPORTATION.

Engine and roundhouse men .....	\$17,199 07
Fuel for locomotives .....	13,873 28
Water supply for locomotives .....	558 52
Oil, tallow and waste for locomotives .....	240 65
Train service .....	12,845 39
Train supplies and expenses .....	851 86
Switchmen, flagmen and watchmen .....	2,818 67
Telegraph expenses .....	4,364 28
Station service .....	12,004 96
Station supplies .....	1,221 14
Car mileage—balance .....	2,025 67
Loss and damage .....	600 62
Injuries to persons .....	30 50
Advertising .....	240 00
Stationery and printing .....	1,661 13
Other expenses .....	100 10
<b>Total .....</b>	<b>\$70,525 84</b>

## GENERAL EXPENSES.

Salaries of general officers .....	\$120 00
Salaries of clerks and attendants .....	280 00
Insurance .....	437 70
Law expenses .....	400 00
Taxes .....	3,509 67
<b>Total .....</b>	<b>\$4,747 37</b>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures .....	38.76	\$54,652 07
Maintenance of equipment .....	7.88	11,127 64
Conducting transportation .....	50.00	70,525 84
General expenses, including taxes .....	3.36	4,747 37
<b>Total operating expenses and taxes .....</b>	<b>100.00</b>	<b>\$141,052 92</b>
Operating expenses and taxes per mile of road .....		\$1,335 73
Operating expenses and taxes per train mile run, for trains, earning revenue, 195,298 miles .....		72.224
<b>Total proportion of expenses and taxes for Michigan .....</b>		<b>\$141,052 92</b>
Percentage of expenses to earnings, 95% .....		
Net earnings per mile of road .....		\$1,405 69
Net earnings per train mile .....		75

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Lenox to Jackson, September, 1884.

## MAIN LINE.

	Miles.	Miles.
In Michigan, from Lenox to Jackson .....		105.60
<b>Total length completed .....</b>		<b>105.60</b>
Total length of road belonging to this company in Michigan .....	105.60	
Aggregate length in Michigan of sidings, spurs and other tracks not above enumerated .....	9.47	
<b>Aggregate length of tracks in Michigan belonging to this company, computed as single track .....</b>		<b>115.07</b>
Gauge of track, 4 feet 8½ inches.		

## Number of bridges and trestles in Michigan.

	Number.	Aggregate length, feet.
Wooden bridges .....	1	80
Iron bridges .....	2	141
Wooden trestles .....	59	4,866
<b>Total .....</b>	<b>62</b>	<b>4,387</b>

*Crossings.—Railroad and highway.*

What railroads cross your road at grade in this State, and at what locality?

Detroit & Bay City R. R. near Rochester.  
 Detroit, Grand Haven & Milwaukee Railway at Pontiac.  
 Flint & Pere Marquette R. R. at Wixom.  
 Ann Arbor R. R. at Hamburg  
 Detroit, Lansing & Northern R. R. at South Lyon.  
 Jackson, Lansing & Saginaw R. R. near Jackson.

At what crossings are interlocking and derailing switches in operation?

At the crossing of the Bay City Division of the Michigan Central R. R. near Rochester; and the Jackson, Saginaw & Lansing Division of the Michigan Central R. R. at Jackson.

What pattern or patterns have you adopted?

Union Switch & Signal Co.

Number of crossings of highways at grade in this State..... 130

Number of crossings of highways at grade in this State at which there are gates or flagmen..... 2

Number of crossings of highways over or under railroad (over 2.)

Number of highway bridges, 18 feet above track..... 2

Have safety guards been erected at overhead obstructions?

Yes.

Are your frogs and guard rails blocked as required by act 174, session laws of 1883?

Yes.

How are they treated?

Filled with wood planking.

*Stations.*

Number of stations on whole lines..... 20

*Employés.*

Number of persons regularly employed on all roads operated by company, including officials..... 154

Classify your employés as per following list:

Number.

Baggagemen.....	3
Brakemen.....	13
Conductors.....	9
Engineers.....	4
Firemen.....	4
Laborers.....	70
Shopmen.....	1
Yardmen.....	3
Others.....	47

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you?..... 215

*Road bed and track.*

Number of track sections in Michigan..... 14

Average lengths of sections, miles..... 7

Average number of men in each section gang..... 4

Number of new ties put in whole line during the year..... 32,689

Number of new ties put in track in Michigan..... 32,689

Average number of new ties per mile of road..... 311

*Bridges and culverts.*

Amount of trestle work replaced with earth during the year, linear feet..... 350 feet.

Timber culverts replaced during the year:

With iron pipe—number..... 6

With sewer pipe—number..... 3

With timber—number..... 1

New bridges built during the year:

Location.	Kind.	Material.	Month built.	Feet in length.
Mile post, 25.9.....	Plate girder.....	Iron.....	March.....	71

## ROLLING STOCK.

	Number.	Present estimated value.
Number of box freight cars.....	18	\$7,200 00
Number of platform cars .....	5	1,500
Total.....	23	\$8,700 00

What patterns of power brakes have you in use, and number of locomotives and cars with each?  
Westinghouse.

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?  
Yes.

What pattern or patterns have you adopted for use?  
Janney and Gould.

How are your passenger cars heated?  
Baker heater and steam.

## MILEAGE, TRAFFIC, ETC.

*Train mileage.*

	In Michigan.
Miles run by passenger trains during the year .....	58,886
Miles run by freight trains during the year .....	52,939
Miles run by mixed trains.....	85,473
Total mileage of trains earning revenue.....	195,298

*Passenger traffic.—Road all in State of Michigan.*

	Numbers.	Miles.	Rate.
Number of through passengers carried, earning revenue.....	21		
Number of local passengers carried, earning revenue .....	80,415		
Total number of passengers carried, earning revenue.....	80,436		
Number of passengers carried one mile.....	1,138,479		
Average distance carried.....		14.15	
Average amount received from each passenger .....			\$0 37.911
Average receipts per mile for through passengers.....			02.606
Average receipts per mile for local passengers.....			02.679
Average receipts per passenger per mile for all passengers.....			02.678

*Freight traffic.—Road all in State of Michigan.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	13,375		
Number of tons of local freight carried, earning revenue.....	200,531		
Total tons of freight carried, earning revenue.....	213,906		
Total mileage of through freight.....		1,417,750	
Total mileage of local freight.....		10,685,277	
Total freight mileage or tons carried one mile.....		12,103,027	
Average ton haul for through freight.....		106.00	
Average ton haul for local freight.....		53.28	
Average ton haul for all freight.....		58.58	
Average amount received for each ton haul.....			\$0 49.808
Average receipts ton per mile, for through freight .....			00.649
Average receipts ton per mile, for local freight.....			00.907
Average receipts ton per mile, for all freight.....			00.877

## FREIGHT TRAFFIC MOVEMENT.—ROAD ALL IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	12,306	380	12,686	5.93
Flour.....	22,582	118	22,700	10.61
Other mill products.....	1,746	24	1,770	.83
Hay.....	5,542	33	5,615	2.62
Tobacco.....	73	19	92	.04
Cotton.....	14,535	—	14,535	6.80
Fruit and vegetables.....	7,787	287	8,024	3.75
Potatoes.....				
<b>Products of animals:</b>				
Live stock.....	3,142	42	3,184	1.49
Dressed meats.....	46	—	46	.02
Other packing house products.....	32	4	36	.02
Poultry, game and fish.....	36	—	36	.02
Wool.....	119	—	119	.06
Hides and leather.....	94	39	133	.06
<b>Products of mines:</b>				
Anthracite coal.....	12,726	8,406	21,132	9.88
Bituminous coal.....	3,725	1,216	4,941	2.31
Coke.....	15	72	87	.04
Stone, sand and other like articles.....	429	890	1,319	.62
<b>Products of forest:</b>				
Lumber.....	31,839	1,536	33,375	15.60
Logs.....				
Shingles.....				
<b>Manufactures:</b>				
Petroleum and other oils.....	1,475	56	1,531	.72
Sugar.....	45	475	520	.24
Iron, pig and bloom.....	4,434	18	4,472	2.09
Iron and steel rails.....	24	—	24	.01
Other castings and machinery.....	311	110	421	.20
Bar and sheet metal.....	6	13	19	.01
Cement, brick and lime.....	2,609	373	2,982	1.39
Agricultural implements.....	1,056	589	1,645	.77
Wagons, carriages, tools, etc.....	826	172	998	.46
Wines, liquors and beers.....	109	17	126	.06
Household goods and furniture.....	226	92	318	.15
<b>Merchandise</b> .....	9,768	25,853	35,621	16.65
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	10,944	24,455	35,399	16.55
<b>Total tonnage</b> .....	143,617	65,289	213,906	100

## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The National Express Company.

Terms—\$2,500 per annum for a minimum weight of 8,000 lbs. daily, carried entire length of road; excess weight at same rate per 100 lbs. Freight received at depot.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

105.60 miles. Western Union Telegraph Co.

*Fast freight lines.*

To what fast freight lines, or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

Name of Company.	General office.	Amount paid.
Armour Car Line.....	Chicago, Ill.....	\$11 15
California Fruit Express.....	Chicago, Ill.....	53
Chicago Refrigerator Car Co.....	Chicago, Ill.....	2 25
Continental Fruit Express.....	Chicago, Ill.....	2 11
Commerce Despatch Line.....	Indianapolis, Ind.....	25 70
Cudahy Refrigerator Line.....	South Omaha, Neb.....	1 33
Hammond Refrigerator Line.....	Hammond, Ind.....	1 71
Mather Horse and Stock Car Co.....	Chicago, Ill.....	1 29
Merchants' Despatch Transportation Co.....	New York City, N. Y.....	27 36
National Despatch Line.....	St. Albans, Vt.....	769 22
Chicago, Boston & Liverpool Refrigerator Line.....	St. Albans, Vt.....	89 99
New York Despatch Refrigerator Line.....	Boston, Mass.....	49 36
St. Louis Refrigerator Car Co.....	St. Louis, Mo.....	1 04
Swift Refrigerator Line.....	Chicago, Ill.....	2 35
Union Refrigerator Transportation Co.....	St. Louis, Mo.....	51

STATE OF MICHIGAN, } ss.  
COUNTY OF WAYNE, }

Almon B. Atwater, superintendent, and James H. Muir, accountant, of the Michigan Air Line Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

A. B. ATWATER,  
JAS. H. MUIR.

Subscribed and sworn to before me this 2d day of April, A. D. 1897.

[L. S.]

L. F. LANG,  
Notary Public, Wayne County, Michigan.

ANNUAL REPORT  
OF THE  
MICHIGAN CENTRAL RAILROAD COMPANY,

*For the year ending December 31, 1936.*

[Filed March 31, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*Chairman*, C. VANDERBILT, New York City.  
*President*, H. B. LEDYARD, Detroit, Mich.  
*Vice President*, E. D. WORCESTER, New York City.  
*Auditor*, A. J. BURT, Detroit, Mich.  
*Treasurer*, D. A. WATERMAN, New York City.  
*General Manager*, H. B. LEDYARD, Detroit, Mich.  
*General Superintendent*, R. H. L'HOMMEDIEU, Detroit, Mich.  
*Division Superintendents*:  
D. S. SUTHERLAND, Detroit, Mich.  
O. F. JORDAN, Jackson, Mich.  
W. J. MARTIN, Bay City, Mich.  
J. H. SNYDER, Chicago, Ill.  
J. B. MORFORD, St. Thomas, Ont.  
*Chief Engineer*, A. TORREY, Detroit, Mich.  
*Superintendent of Telegraph*, E. E. TORREY, Detroit, Mich.  
*Local Treasurer*, J. E. GRIFFITHS, Detroit, Mich.  
*General Passenger and Ticket Agent*, O. W. RUGGLES, Chicago, Ill.  
*General Freight Traffic Manager*, B. B. MITCHELL, Detroit, Mich.  
*General Counsel*, ASHLEY POND, Detroit, Mich.  
*General Attorney*, HENRY RUSSEL, Detroit, Mich.

DIRECTORS.

C. VANDERBILT, New York City.  
W. K. VANDERBILT, New York City.  
F. W. VANDERBILT, New York City.  
H. B. LEDYARD, Detroit, Mich.  
E. D. WORCESTER, New York City.  
S. F. BARGER, New York City.  
C. M. DEPEW, New York City.  
ASHLEY POND, Detroit, Mich.  
F. S. WINSTON, Chicago, Ill.  
Terms expire, May, 1897.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: March 28, 1846.  
Number of stockholders at date of last election: 1,485.  
Number of stockholders in Michigan at same date: 28.  
Amount of full paid stock held in Michigan at same date: \$116,900.  
Date of annual meeting of stockholders: Thursday following first Wednesday in May.  
Fiscal year of company ends December 31.  
General offices of the company are located at New York City, Grand Central Station; Detroit, Mich., foot of Third street; Chicago, Ill., Monadnock Building.



# MICHIGAN CENTRAL RAILROAD COMPANY.

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## GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$13,821,614 44
Total expenses including taxes.....	\$10,892,349 90	
Net income.....		\$3,429,264 54
Interest on funded debt { Michigan Central.....	\$880,000 00	
{ leased lines.....	407,800 00	
	\$1,067,800 00	
Rentals—Leased lines and Canada Southern interest.....	1,326,765 03	
Canada Southern proportion of net earnings.....	296,474 24	
		2,691,039 27
Balance applicable to dividends.....		738,225 27
Dividends declared (4 per cent).....		749,820 00
Balance for the year (deficit).....	\$11,294 78	
Balance (profit and loss) last year.....		\$7,152,979 66
Items not included in above, as follows:		
Income from sundry investments.....		39,686 84
Balance forward to next year.....	7,181,370 27	
	\$7,192,665 00	\$7,192,665 00

## ANALYSIS OF CAPITAL STOCK.

Par value of shares.....	\$100 00
Number of shares issued.....	187,380
Amount paid in on common.....	\$18,738,000 00
Total amount paid in, as per books of the company.....	\$18,738,000 00
Paid in per mile of road owned by company, 270.07 miles.....	69,882 77

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
<i>Bonds, Michigan Central Railroad, proper:</i>				
Consolidated first mortgage, May 1, 1872.....	7%	May 1, 1902.....	New York City.....	\$8,000,000 00
Consolidated first mortgage, Nov. 1, 1893.....	5%	May 1, 1902.....	New York City.....	2,000,000 00
Total Michigan Central proper.....				\$10,000,000 00
<i>Bonds issued by the Michigan Central Railroad Company, accounts of respective leased lines:</i>				
Grand River Valley R. R.:				
General first mortgage, Sept. 1, 1879.....	6%	Sept. 1, 1909.....	New York City.....	500,000 00
General first mortgage, March 1, 1886.....	6%	Sept. 1, 1909.....	New York City.....	1,000,000 00
Detroit & Bay City R. R.:				
General first mortgage, March 1, 1881.....	5%	March 1, 1931.....	New York City.....	3,576,000 00
Kalamazoo & South Haven R. R.:				
General first mortgage, Nov. 1, 1889.....	5%	Nov. 1, 1939.....	New York City.....	700,000 00
Michigan Air Line R. R.:				
General first mortgage, Jan. 1, 1890.....	4%	Jan. 1, 1940.....	New York City.....	2,600,000 00
Total leased lines.....				\$8,376,000 00
Total funded debt.....				\$18,376,000 00

### UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For miscellaneous.....		\$2,522,833 98

## RECAPITULATION.

Total funded debt, M. C. proper .....	\$10,000,000 00
Total unfunded debt .....	2,522,833 98
Total debt liabilities, M. C. proper .....	\$12,522,833 98
Amount of debt liabilities per mile of road, 270.07 miles .....	46,368 85
Total amount of stock and debt, M. C. proper .....	31,260,833 98
Stock and debt per mile of road, 270.07 miles .....	115,750 86

## GENERAL BALANCE SHEET.—Dr.

Construction account, includes amount expended, account construction of leased lines.....	\$42,490,129 63
Other investments:	
Advanced on account of land purchased in construction of Detroit Belt Line .....	\$259,825 32
Sundry securities.....	670,696 25
	930,521 57
Cash items:	
Cash .....	\$402,397 85
Due from agents.....	202,632 13
	605,029 98
Other assets:	
Materials and supplies .....	\$1,661,358 35
Debit balances from companies and individuals.....	1,131,164 72
	2,792,523 07
Total.....	\$46,818,204 25

## CONSTRUCTION ACCOUNT.

Michigan Central Railroad Co.....	\$31,116,257 09
Michigan Air Line.....	3,154,287 15
Grand River Valley R. R. Co.....	2,501,715 87
Jackson, Lansing & Saginaw R. R. Co.....	978,740 16
Kalamazoo & South Haven R. R. Co.....	815,610 24
Detroit & Bay City R. R. Co.....	3,744,297 78
Saginaw Bay & Northwestern R. R. Co.....	176,739 00
Bay City & Battle Creek R'y Co.....	7,171 75
Battle Creek & Sturgis R'y Co.....	350 59
Total.....	\$42,490,129 63

## GENERAL BALANCE SHEET.—Cr.

Capital stock .....	\$18,738,000 00
Funded debt: Bonds, Michigan Central R. R. proper .....	10,000,000 00
Bonds, issued account leased lines .....	8,376,000 00
Unfunded debt:	
Interest unpaid .....	\$39,305 00
Dividends unpaid .....	4,812 00
Notes payable .....	900,000 00
Vouchers and accounts .....	488,555 19
Other liabilities (list as follows):	
Pay rolls .....	494,905 62
Dividend No. 69, payable Feb. 1, 1897 .....	374,760 00
Accrued interest of 1896 payable in 1897 .....	260,496 17
	2,522,833 98
Profit and loss or income accounts .....	7,181,370 27
Total.....	\$46,818,204 25

## COST OF ROAD AND EQUIPMENT.

## PURCHASED BY PRESENT COMPANY.

When purchased: September 24, 1846.	
Original cost to present company, of road and equipment .....	\$2,000,000 00
Amount expended since purchase, account of construction .....	29,116,257 09
Amount expended since purchase, account of equipment .....	
Total cost to date of report .....	31,116,257 09
Average cost per mile of road (not including sidings) 270.07 miles .....	115,215 53
Proportion of cost for Michigan, 221 miles .....	25,462,632 13

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

<i>Leased or proprietary roads.</i>	<i>Extensions and new sidings.</i>
Jackson, Lansing & Saginaw R. R. ....	\$113,818 52
Total charges to property account as above .....	\$113,818 52
Property sold and credited .....	2,100 00
Net addition to property account .....	\$111,718 52

**ANALYSIS OF EARNINGS.—IN STATE OF MICHIGAN.**  
**PASSENGER EARNINGS.**

	Local fares.	Through fares.	Total passenger fares.	Express and baggage.	Mails.	Total.	Per train mile.	Per mile of road.
<b>Main line</b>	\$746,187 22	\$491,270 85	\$1,237,458 07	\$195,001 21	\$130,707 67	\$1,563,166 95		\$7,078 15
<i>Leased or proprietary roads:</i>								
Michigan Air Line R. R.	50,883 42	50 73	50,784 15	2,453 65	12,622 16	63,859 96		603 48
Grand River Valley R. R.	112,833 46	17,414 49	130,247 95	4,178 17	15,751 58	150,277 70		1,798 50
Jackson, Lansing & Saginaw R. R.	355,754 40	17,427 60	373,182 00	14,413 87	43,641 29	431,242 16		1,335 53
Kalamazoo & South Haven R. R.	27,699 11	401 84	28,100 95	1,269 84	3,334 94	32,705 73		827 99
Detroit & Bay City R. R.	173,020 91	4,600 39	177,621 30	11,303 70	28,343 08	215,275 08		1,358 87
Toledo, Canada Southern & Detroit R. R.	50,877 38	74,932 16	125,809 54	6,967 01	18,016 96	150,793 51		3,190 05
Michigan Midland & Canada R. R.	4,721 08		4,721 08	122 94	941 90	5,785 92		594 83
Canada Southern Bridge Co.	1,266 20		1,266 20		103 86	1,370 06		874 23
Saginaw Bay & Northwestern R. R.	6,845 41		6,845 41		1,197 49	8,042 90		96 89
Battle Creek & Sturgis R. R.	9,345 47		9,345 47	122 94	2,028 07	11,536 48		341 91
Bay City & Battle Creek R. R.	3,103 80		3,103 80		860 96	3,964 76		220 37
Detroit, Delray & Dearborn R. R.	180 24		180 24			180 24		87 24
<b>Total passenger department earnings</b>	\$1,542,620 10	\$606,098 06	\$2,148,718 16	\$235,870 83	\$255,617 88	\$2,640,206 87	\$1 01	\$2,323 00

## FREIGHT EARNINGS.

	Local traffic.	Through traffic.	Total traffic.	Total.	Per train mile.	Per mile of road.
Main line .....	\$890,939 83	\$1,779,054 20	\$2,669,994 03	\$2,669,994 03	.....	\$12,036 31
<i>Licensed or proprietary roads:</i>						
Michigan Air Line R. R. ....	135,333 67	97,408 07	232,741 74	232,741 74	.....	2,123 47
Grand River Valley R. R. ....	67,115 47	60,292 13	127,408 00	127,408 00	.....	1,520 56
Jackson, Lansing & Saginaw R. R. ....	665,300 97	64,033 97	729,334 94	729,334 94	.....	2,233 70
Kalamazoo & South Haven R. R. ....	23,086 26	4,561 16	27,647 42	27,647 42	.....	699 93
Detroit & Bay City R. R. ....	226,815 50	212,915 93	439,731 43	439,731 45	.....	2,836 93
Toledo, Canada Southern & Detroit R'y. ....	77,735 20	308,320 67	386,055 87	386,055 87	.....	12,334 53
Michigan Midland & Canada R. R. ....	1,680 11	.....	1,680 11	1,680 11	.....	314 45
Canada Southern Bridge Co. ....	279 43	.....	279 43	279 43	.....	76 36
Saginaw Bay & Northwestern R. R. ....	15,532 23	655 02	16,187 25	16,187 30	.....	193 04
Battle Creek & Sturgis R'y. ....	6,149 44	5 26	6,154 70	6,154 79	.....	163 10
Bay City & Battle Creek R'y. ....	8,155 64	76 43	8,232 07	8,232 07	.....	179 56
Detroit, Delray & Dearborn R. R. ....	.....	.....	.....	.....	.....	.....
Total freight department earnings.....	\$2,103,148 90	\$2,724,351 35	\$4,827,500 25	\$4,827,500 25	\$1 32	\$4,247 50

## ANALYSIS OF EARNINGS.—ENTIRE LINES.

## PASSENGER EARNINGS.

	Local fares.	Through fares.	Total passenger fares.	Express and baggage.	Mails.	Total.	Per train mile.	Per mile of road.
<b>Main line</b>	\$968,978 51	\$631,631 06	\$1,590,609 57	\$250,651 56	\$168,009 89	\$2,009,371 02		\$7,073 15
<i>Leased or proprietary roads</i>								
Michigan Air Line R. R.	53,479 37	72 83	53,552 20	2,621 61	12,828 20	69,471 11		608 43
Joliet & Northern Indiana R. R.	13,743 05	101 06	13,844 11	696 42	1,932 36	16,472 79		306 06
Grand River Valley R. R.	112,938 45	17,414 49	130,352 94	4,173 17	15,751 58	150,277 70		1,793 50
Jackson, Lansing & Saginaw R. R.	335,754 40	17,437 60	353,192 00	14,413 87	43,641 29	431,243 16		1,335 53
Kalamazoo & South Haven R. R.	27,699 11	401 84	28,100 95	1,369 84	3,334 94	33,705 73		1,837 99
Detroit & Bay City R. R.	173,020 91	4,600 39	177,621 30	11,305 70	26,343 06	215,270 05		1,303 87
Toledo, Canada Southern & Detroit R'y	63,417 44	93,396 66	156,814 10	8,664 06	22,457 44	187,931 64		2,190 05
Canada Southern R'y (in Canada)	631,367 07	364,750 93	996,118 00	115,556 26	98,246 87	1,209,921 13		3,133 67
Michigan Midland & Canada R. R.	4,721 06	4,721 06	9,442 12	122 94	944 80	5,788 82		244 28
Canada Southern Bridge Co.	1,366 20		1,366 20		108 86	1,370 06		374 38
Saginaw Bay & Northwestern R. R.	6,845 41		6,845 41		1,197 49	8,042 90		26 89
Battle Creek & Sturgis R'y	9,845 47		9,845 47	122 94	2,038 07	11,936 48		341 91
Bay City & Haultain Creek R'y	3,106 30		3,106 30		860 98	3,967 28		220 37
Detroit, Dalray & Dearborn R. R.	130 24		130 24			130 24		37 24
<b>Total passenger department earnings</b>	\$2,415,867 12	\$1,139,796 88	\$3,545,664 00	\$409,628 36	\$398,240 85	\$4,353,525 03	\$1 06	\$2,650 76

## FREIGHT EARNINGS.

	Local Traffic.	Through Traffic.	Total Traffic.	Total.	Per train mile.	Per mile of road.
<b>Main line and branches.....</b>	51,631,516 47	41,797,637 56	93,419,154 03	93,419,154 03		942,086 91
<i>Leased or proprietary roads:</i>						
Michigan Air Line R. R.	145,238 76	100,451 82	245,690 58	245,690 58		2,133 47
Joliet & Northern Indiana R. R.	81,775 40	88,139 69	119,915 09	119,915 09		2,664 78
Grand River Valley R. R.	78,247 05	49,160 95	127,408 00	127,408 00		1,520 58
Jackson, Lansing & Saginaw R. R.	697,499 41	31,838 53	729,338 94	729,338 94		2,253 70
Kalamazoo & South Haven R. R.	23,362 12	4,255 30	27,617 42	27,617 42		699 03
Detroit & Bay City R. R.	355,247 68	83,483 79	438,731 45	438,731 45		2,836 96
Toledo, Saginaw Southern & Detroit R'y	590,061 95	136,691 86	726,753 80	726,753 80		12,394 58
Canada Southern R'y (in Canada)	1,776,633 53	1,772,656 17	3,549,289 70	3,549,289 70		9,339 28
Michigan Midland & Canada R. R.	1,690 11	1,690 11	1,690 11	1,690 11		114 45
Canada Southern Bridge Co.	279 46	279 46	279 46	279 46		76 36
Saginaw Bay & Northwestern R. R.	16,190 30		16,190 30	16,190 30		193 04
Battle Creek & Sturgis R'y	6,154 79		6,154 79	6,154 79		182 10
Bay City & Battle Creek R'y	3,232 07		3,232 07	3,232 07		179 56
Detroit, Delray & Dearborn R. R.						
<b>Total freight department earnings.....</b>	65,368,149 10	84,014 11 06	99,412,461 76	99,412,461 76	91 64	96,731 03

# MICHIGAN CENTRAL RAILROAD COMPANY.

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Total transportation earnings, entire line .....	\$13,765,937 39
Transportation earnings per mile of road .....	\$8,831 78
Transportation earnings per train mile .....	1 30

Miscellaneous receipts from operating account, other than for transportation,  
as follows:

From other sources .....	55,627 05
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Distribution of miscellaneous earnings between main line and leased or proprietary roads:

	Total mis- cellaneous.	Proportion for Michigan.
Company:		
Michigan Central R. R. ....	\$39,944 79	\$31,076 13
Michigan Air Line R. R. ....	140 39	133 00
Joliet & Northern Indiana R. R. ....	121 93	
Grand River Valley R. R. ....	238 45	238 45
Jackson, Lansing & Saginaw R. R. ....	6,795 11	6,795 11
Kalamazoo & South Haven R. R. ....	32 57	32 57
Detroit & Bay City R. R. ....	1,233 44	1,233 44
Toledo, Canada Southern & Detroit R'y. ....	820 67	658 40
Michigan Midland & Canada R. R. ....	1 00	1 00
Canada Southern Bridge Co. ....	302 43	302 43
Saginaw Bay & Northwestern R. R. ....	17 49	17 49
Battle Creek & Sturgis R'y. ....	13 00	13 00
Bay City & Battle Creek R'y. ....	1 00	1 00
Canada Southern R'y (in Canada) .....	5,964 78	

Total earnings from operation of road .....	\$13,821,614 44
---------------------------------------------	-----------------

Total earnings per mile of road .....	\$8,415 65
Total earnings per train mile .....	1 32

Proportion of taxable earnings for Michigan:

Michigan Central R. R. ....	\$4,254,267 16
Michigan Air Line R. R. ....	238,734 70
Grand River Valley R. R. ....	277,924 15
Jackson, Lansing & Saginaw R. R. ....	1,167,372 21
Kalamazoo & South Haven R. R. ....	60,385 72
Detroit & Bay City R. R. ....	656,239 97
Toledo, Canada Southern & Detroit R. R. ....	734,507 78
Michigan Midland & Canada R. R. ....	7,469 98
Canada Southern Bridge Co. ....	1,951 97
Saginaw Bay & Northwestern R. R. ....	24,250 69
Battle Creek & Sturgis R'y. ....	17,724 27
Bay City & Battle Creek R'y. ....	7,199 85
Detroit, Delray & Dearborn R. R. ....	180 24

Total proportion of taxable earnings in Michigan .....	\$7,508,208 64
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Total taxable earnings per mile of road in Michigan .....	6,606 14
Income other than from earnings .....	39,685 84

Total income from all sources .....	\$13,861,299 78
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Proportion of income for Michigan .....	7,508,208 64
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## ANALYSIS OF EXPENSES.

### MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway .....	\$1,048,784 30
Renewals of rails .....	62,689 85
Renewals of ties .....	263,622 39
Repairs and renewals of bridges and culverts .....	158,654 42
Repairs and renewals of fences, road crossings, signs and cattle guards .....	147,461 78
Repairs and renewals of buildings and fixtures .....	165,172 41
Repairs and renewals of docks and wharves .....	5,854 64
Repairs and renewals of telegraph .....	19,125 81
Stationery and printing .....	2,348 36
Other expenses .....	19,429 00
Total .....	\$1,922,546 96

### MAINTENANCE OF EQUIPMENT.

Superintendence .....	\$63,866 10
Repairs and renewals of locomotives .....	484,083 81
Repairs and renewals of passenger cars .....	205,939 28
Repairs and renewals of freight cars .....	688,719 83
Repairs and renewals of work cars .....	572 88
Repairs and renewals of marine equipment .....	22,428 01
Repairs and renewals of shop machinery and tools .....	26,913 71
Stationery and printing .....	2,800 22
Other expenses .....	42,765 72
Total .....	\$1,542,384 55

## CONDUCTING TRANSPORTATION.

Superintendence.....	\$149,442 18
Engine and roundhouse men.....	943,522 38
Fuel for locomotives.....	975,391 25
Water supply for locomotives.....	49,015 61
Oil, tallow and waste for locomotives.....	34,557 52
Other supplies for locomotives.....	4,717 63
Train service.....	690,586 72
Train supplies and expenses.....	219,398 35
Switchmen, flagmen and watchmen.....	448,957 16
Telegraph expenses.....	226,458 43
Station service.....	855,742 77
Station supplies.....	77,125 44
Car mileage—balance.....	422,623 39
Loss and damage.....	46,045 25
Injuries to persons.....	70,844 09
Clearing wrecks.....	8,225 38
Operating marine equipment.....	72,063 50
Advertising.....	145,648 52
Outside agencies.....	180,354 40
Rent of buildings and other property.....	580,160 50
Stationery and printing.....	75,118 02
Other expenses.....	27,401 24
<b>Total.....</b>	<b>\$6,281,472 73</b>

## GENERAL EXPENSES.

Salaries of general officers.....	\$72,400 00
Salaries of clerks and attendants.....	96,540 02
General office expenses and supplies.....	5,651 09
Insurance.....	11,104 11
Law expenses.....	53,422 91
Stationery and printing (general offices).....	6,370 95
Other expenses.....	74,003 59
Taxes.....	326,452 99
<b>Total.....</b>	<b>\$645,945 66</b>

## RECAPITULATION OF EXPENSES.

		Per cent of expenses.
Maintenance of way and structures.....	18.50	\$1,922,546 96
Maintenance of equipment.....	14.84	1,542,384 53
Conducting transportation.....	60.44	6,281,472 73
General expenses, including taxes.....	06.22	645,945 66
<b>Total operating expenses and taxes.....</b>	<b>100.00</b>	<b>\$10,392,349 90</b>
Operating expenses and taxes per mile of road.....	\$6,327 65	
Operating expenses and taxes per train mile run for trains earning revenue, 10,487,358 miles.....	99	

## PROPORTION OF OPERATING EXPENSES AND TAXES FOR MICHIGAN.

Main line			\$3,323,749 39
<i>Leased or proprietary roads:</i>			
Michigan Air Line R. R.			232,353 54
Grand River Valley R. R.			270,201 10
Jackson, Lansing & Saginaw R. R.			1,184,727 89
Kalamazoo & South Haven R. R.			47,804 81
Detroit & Bay City R. R.			505,068 20
Toledo, Canada Southern & Detroit R'y.			424,379 19
Michigan Midland & Canada R. R.			14,549 29
Canada Southern Bridge Co.			19,745 46
Saginaw Bay & Northwestern R. R.			117,433 55
Battle Creek & Sturgis R'y.			7,274 64
Bay City & Battle Creek R'y.			4,156 94
Detroit, Delray & Dearborn R. R.			490 04
Total proportion of expenses for Michigan			\$6,151,934 64
Percentage of expenses to earnings	75.19		
Net earnings per mile of road		\$2,068 00	
Net earnings per train mile			32.699



## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Detroit, Mich., to Chicago, Ill., May, 1852.

MAIN LINE.		Miles.	Miles.
In Michigan, from Detroit, Mich. to State line.....		221.00	
In Indiana, from Michigan State line to Illinois State line.....		43.00	
In Illinois, from Indiana State line to Kensington.....		6.07	
Total length completed.....			270.07
Length of double track on main line.....			138.40
Total length of road belonging to this company.....			270.07
Total length of road belonging to this company in Michigan.....	221.00		
Aggregate length in Michigan of sidings, spurs and other tracks not above enumerated.....	190.59		
Aggregate length of tracks in Michigan belonging to this company, computed as single track.....			411.59

Gauge of track, 4 feet 8½ inches.

*Proprietary or leased roads operated by this company.*

Name, description and length of each:	Total miles. In Michigan.
Chicago & Kensington.....	14.00
Michigan Air Line R. R.....	115.16
Joliet & Northern Indiana R. R.....	45.00
Grand River Valley R. R.....	83.79
Jackson, Lansing & Saginaw R. R.....	322.90
Kalamazoo & South Haven R. R.....	89.50
Detroit & Bay City R. R.....	155.00
Michigan Midland & Canada R. R.....	14.68
Canada Southern Bridge Co.....	3.66
Saginaw Bay & Northwestern R. R.....	83.01
Battle Creek & Sturgis R'y.....	33.80
Bay City & Battle Creek R'y.....	18.00
Toledo, Canada Southern & Detroit R'y.....	58.92
Detroit, Delray & Dearborn R. R.....	4.84
Canada Southern R'y (in Canada).....	390.04
Total.....	1,372.30

*Number of bridges and trestles in Michigan.*

	Number.	Aggregate length, feet.
Wooden bridges.....	7	372
Stone bridges { boxes.....	260	1,239
{ arches.....	51	655
Iron bridges.....	60	9,468
Combination bridges.....	1	900
Wooden trestles.....	600	30,086
Total.....	979	42,700

*Draw bridges in Michigan.*

How many on your line.....	7
Where located, when built, and length of draw span?	Feet.
a, St. Charles, over Bad River, rebuilt 1890.....	84½
a, Palms, over Tittabawassee River, rebuilt 1888.....	99½
b, South of West Bay City, over Saginaw River, rebuilt 1889.....	131
c, Bay City, over Saginaw River, rebuilt 1831 and 1895.....	139
c, East Saginaw, over Saginaw River, rebuilt in 1896.....	190
c, Grosse Isle, over Detroit River, rebuilt 1884 and 1893.....	340½
c, South of Woodmere, over Rouge River, rebuilt 1887.....	180
Character of structure:	
a, Iron plate girder on stone piers.	
b, Wooden Howe truss on wooden piers.	
c, Iron truss on stone piers.	
Material of which constructed:	
a, Iron and stone.	
b, Wood.	
c, Iron and stone.	

Height above water, and depth of water under bridge:  
From 15 to 30 feet.

How swung, by engine or hand power?  
1 by electric motor, 1 by steam, all others by hand.

Approaches straight or curved?  
Straight.

Do you require all trains to come to full stop before crossing a draw, and how are they signaled?  
Yes. By bridge tender.

*Crossings.—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?  
Lake Shore & Michigan Southern Railroad, at West Detroit, Albion, Kalamazoo, Jackson, Homer, Three Rivers, south end of Junction yard, Detroit, Woodward avenue, Detroit, and Eaton Rapids.  
Wabash Railroad, at West Detroit and Delray.  
Flint & Pere Marquette Railroad, at Wayne Junction, East Saginaw, Otter Lake, Bay City, North Saginaw and South Saginaw.  
Detroit, Monroe & Toledo Railroad, at Detroit.  
Grand Trunk Railway, at Detroit (Woodward avenue.)  
Detroit, Grand Haven & Milwaukee Railroad, at Milwaukee Junction and Owosso.  
Pontiac, Oxford & Port Austin Railroad, at Oxford.  
Michigan Air Line Railroad, at Rochester and Jackson.  
Chicago & Grand Trunk Railway, at Lapeer, Nichols, Charlotte, Lansing, Cassopolis and Jackson.  
Port Huron & Northwestern Railroad, at Vassar and near East Saginaw.  
Saginaw, Tuscola & Huron Railroad, at Reese.  
Grand Rapids & Indiana Railroad, at Kalamazoo and Wasopi.  
Saginaw Bay & Northwestern Railroad at Pinconning.  
Chicago & West Michigan Railroad, at Lansing and North Lansing.  
Toledo, Ann Arbor & North Michigan Railroad at Owosso Junction and East Saginaw.  
Cincinnati, Jackson & Mackinaw Railroad at Homer.  
Chicago, Kalamazoo & Saginaw Railroad, at Hastings.  
Toledo, Saginaw & Muskegon Railroad, at North Saginaw and West Bay City.  
Midland & Hubbard Railroad, one-half mile east of Midland.  
E. G. Peters R. R., near Grayling (Main Line & Twin Lakes Branch.)  
Detroit & Mackinaw Railroad, at Pinconning.

What railroads cross your road either over or under your grade in this State, and where?

Over:

Detroit, Lansing & Northern R. R., Flint & Pere Marquette R. R., Wabash R. R., and Canadian Pacific R. R. at Woodbridge street, Detroit.  
Toledo Ann Arbor & North Michigan R. R. at Ann Arbor.  
Flint & Pere Marquette R. R., at six miles west of Detroit.  
Cincinnati, Wabash & Michigan R. R., at New Buffalo.  
Cincinnati, Jackson & Mackinaw Railroad, at 2 miles east of Augusta.

Under:

Cincinnati, Wabash & Michigan R. R., at Niles and two miles south of Niles.  
Indiana & Lake Michigan R. R., at Galien.

At what crossings are interlocking and derailing switches in operation?

Lake Shore & Michigan Southern Railroad, at West Detroit, Woodward avenue, Detroit, Albion, Woodmere, Homer and Kalamazoo.  
Flint & Pere Marquette Railroad, at Wayne Junction, one mile south of Saginaw, one mile north of Saginaw and Bay City.  
Grand Rapids & Indiana Railroad at Wasopi, Homer and Kalamazoo.  
Chicago & Grand Trunk R. R., at Lapeer, Cassopolis, Nichols, Lansing and Jackson.  
Cincinnati, Jackson & Mackinaw Railroad, at C. J. & M. crossings.  
Chicago, Kalamazoo & Saginaw Railroad, at Hastings.  
Detroit, Lansing & Northern Railroad, at Grand Rapids.  
Cincinnati, Saginaw & Mackinaw Railroad, north and south of West Bay City, and north of Saginaw.  
Detroit, Grand Haven & Milwaukee Railroad, at Milwaukee Junction.  
Wabash R. R., at West Detroit and Woodmere.  
Grand Trunk R'y, at Milwaukee Junction and Woodward avenue, Detroit.  
Chicago & West Michigan R. R., at Grand Junction.  
Michigan Air Line R. R., at Rochester Junction.  
Pontiac, Oxford & Port Austin R. R., at Oxford.  
E. G. Peters R. R., north of Grayling.

What pattern or patterns have you adopted?

Union Switch and Signal Co. (Swissvale, Pa.), pattern.

Number of crossings of highways at grade in this State .....	1,341
Number of crossings of highways at grade in this State at which there are gates or flagmen .....	136
Number of crossings at which there are electric or automatic signals .....	20

What pattern or patterns in use?

Gates—Safety Gate Co., Pneumatic Gate Co., Pennsylvania Steel Co., and Saginaw Gate Co.  
Electric or automatic signals.—Pennsylvania Steel Co., Ross & Holden, Oriol Cross Alarm Co., and Hall Signal Co.

Number of crossings of highways over or under railroad: over, 36; under 17.....	53
Number of highway bridges 18 feet above track.....	29
Number of highway bridges, less than 18 feet above track.....	9

Have safety guards been erected at overhead obstructions?  
Yes.

Are your frogs and guard rails blocked as required by act 174, session laws of 1893.  
Yes.

How are they treated?  
Filled with wood, spiked to ties.

*Stations.*

Number of stations on whole lines .....	506
Same in Michigan .....	325

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials .....	9,496
Same in Michigan .....	6,204

Classify your employes as per following list:

	Number.
Baggagemen .....	77
Brakemen .....	570
Conductors .....	307
Engineers .....	494
Firemen .....	516
Laborers .....	2,318
Shopmen .....	882
Yardmen .....	666
Others .....	3,635

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? .....	2,002 $\frac{1}{4}$
Give the number of miles required to complete fence both sides of your track in Michigan, and the counties in which needed:	
Gladwin county .....	13 $\frac{1}{4}$
Bay county .....	3 $\frac{1}{4}$
Crawford county .....	43
Otsego county .....	2
Montmorency county .....	8
Total miles required .....	70

*Road bed and track.*

Number of track sections in Michigan .....	253
Average lengths of sections, miles .....	4.66
Average number of men in each section gang .....	4
Number of new ties put in whole line during the year .....	646,065
Number of new ties put in track in Michigan .....	451,043
Average number of new ties per mile of road .....	400
New rails put in track:	
Steel (tons 3,500) miles .....	26
Total miles of track laid with new rails .....	26

*Bridges and culverts.*

Amount of trestle work replaced with earth during the year (linear feet) .....	325
Number.	
Timber culverts replaced during the year:	
With iron pipe .....	64
With timber .....	20

New bridges built during the year.—Number 5.

Location.	Kind.	Material.	Month built.	Feet in length.
South of Leonidas .....	Deck plate girder .....	Steel .....	February .....	340 ft.
East of Adair .....	" " " " .....	" " " " .....	August .....	66 ft.
Marion .....	Arch .....	Stone .....	September .....	20 ft.
Battle Creek .....	Pile trestle .....	Wood .....	July to Oct. .....	1,070 ft.
Battle Creek .....	" " " " .....	" " " " .....	May & June .....	585 ft.

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives more than 30 tons weight, exclusive of tender.....	409	\$3,872,187 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender.....	52	172,500 00
Total.....	461	\$3,044,687 00
Number of passenger cars—12-wheel, including official cars.....	17	\$181,000 00
Number of passenger cars—8 wheel, including official cars.....	245	813,200 00
Number of express and baggage cars.....	110	234,400 00
Number of box freight cars.....	8,295	2,806,375 00
Number of stock cars.....	1,039	803,900 00
Number of platform cars.....	3,108	701,025 00
Number of ore cars.....	334	83,500 00
Number of conductors' way cars.....	253	113,850 00
Other cars as follows:		
School car (air brakes).....	1	
Boarding.....	34	
Hand derrick.....	4	
Steam derrick.....	3	
Pile driver.....	2	
Steam shovel.....	6	
Snowplow.....	13	
Rail saw.....	1	
Tool cars.....	88	
Stone cars.....	2	
Oil tanks.....	42	
	191	138,000 00
Total.....	13,587	\$5,875,850 00
Number of locomotives equipped with power brakes.....	396	
Number of passenger train cars equipped with power brakes.....	372	
Number of freight cars equipped with power brakes.....	5,025	
What patterns of power brakes have you in use, and number of locomotives and cars with each?		
American steam and Westinghouse.		
Cars—Westinghouse, 5,397; locomotives—Westinghouse, 348; American steam, 48.		
Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?		
Yes.		
What pattern or patterns have you adopted for use?		
Gould.		
How are your passenger cars heated?		
Hot water and steam.		

## MILEAGE, TRAFFIC, ETC.

Train mileage.		Entire lines. In Michigan.	
Miles run by passenger trains during the year.....	4,237,946	2,610,057	
Miles run by freight trains during the year.....	5,741,905	3,172,995	
Miles run by mixed trains.....	507,507	355,818	
Total mileage of trains earning revenue.....	10,487,358	6,138,865	
Passenger traffic.—Entire lines.			
	Number.	Miles.	Rate.
Number of through passengers carried, earning revenue.....	220,467		
Number of local passengers carried, earning revenue.....	2,343,592		
Total number of passengers carried, earning revenue.....	2,564,059		
Number of passengers carried one mile.....	156,317,124		
Average distance carried.....		60.96	
Average amount received from each passenger.....			\$1 38
Average receipts per mile for through passengers.....			02.0235
Average receipts per mile for local passengers.....			02.4008
Average receipts per passenger per mile for all passengers.....			02.2653

*Passenger traffic.—In State of Michigan.*

Number of through passengers carried, earning revenue .....	220,474		
Number of local passengers carried, earning revenue .....	1,880,400		
Total number of passengers carried, earning revenue .....	2,100,874		
Number of passengers carried one mile .....	90,541,682		
Average distance carried .....		48.10	
Average amount received from each passenger .....			\$1 02
Average receipts per mile for through passengers .....			01.584
Average receipts per mile for local passengers .....			02.886
Average receipts per passenger per mile for all passengers .....			02.732

*Freight traffic.—Entire lines.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue .....	1,823,439		
Number of tons of local freight carried, earning revenue .....	5,457,581		
Total tons of freight carried earning revenue .....	7,276,270		
Total mileage of through freight .....		777,061,725	
Total mileage of local freight .....		702,559,796	
Total freight mileage or tons carried one mile .....		1,480,251,521	
Average ton haul for through freight .....		426	
Average ton haul for local freight .....		129	
Average ton haul for all freight .....		199	
Average amount received for each ton haul .....			\$1 29
Average receipts ton per mile for through freight .....			00.515
Average receipts ton per mile, for local freight .....			00.768
Average receipts ton per mile for all freight .....			00.686

*Freight traffic.—In State of Michigan.*

Number of tons of through freight carried, earning revenue .....	2,857,394		
Number of tons of local freight carried, earning revenue .....	2,862,249		
Total tons of freight carried, earning revenue .....	5,739,643		
Total mileage of through freight .....		421,708,050	
Total mileage of local freight .....		247,517,340	
Total freight mileage or tons carried one mile .....		669,220,390	
Average ton haul for through freight .....		148	
Average ton haul for local freight .....		86	
Average ton haul for all freight .....		117	
Average amount received for each ton haul .....			\$0 84
Average receipts ton per mile, for through freight .....			00.646
Average receipts ton per mile for local freight .....			00.850
Average receipts ton per mile, for all freight .....			00.721

## FREIGHT TRAFFIC MOVEMENT.—ENTIRE LINES.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain .....	289,914	377,622	667,536	9.17
Flour .....	105,498	97,089	205,987	2.83
Other mill products .....	63,643	44,409	108,057	1.48
Hay .....	73,044	50,409	123,453	1.68
Tobacco .....	896	7,437	8,323	0.11
Cotton .....		51,944	51,944	0.70
Fruit and vegetables .....	85,311	75,354	160,565	2.20
Potatoes and other agricultural products .....	66,712	42,155	108,867	1.50
<b>Products of animals:</b>				
Live stock .....	67,010	138,658	200,668	2.75
Dressed meats .....	120,585	111,986	232,571	3.20
Other packing house products .....	95,299	97,108	192,407	2.64
Poultry, game and fish .....	4,189	4,520	8,959	0.12
Wool .....	2,243	4,466	6,709	0.09
Hides and leather .....	9,420	13,531	22,941	0.32
<b>Products of mines:</b>				
Anthracite coal .....		458,720	458,720	6.30
Bituminous coal .....		717,290	717,290	9.85
Coke and charcoal .....	12,589	19,059	31,678	0.44
Ore .....		9,015	9,015	0.12
Stone, sand, and other like articles .....	223,371	77,439	310,890	4.27
Salt .....	53,737	13,177	71,914	0.98
<b>Products of forest:</b>				
Lumber .....	384,181	185,479	569,660	7.83
Logs and other forest products .....	699,865	136,187	836,052	11.49
<b>Manufactures:</b>				
Petroleum and other oils .....	109,080	113,731	227,811	3.13
Sugar .....	11,185	70,026	81,211	1.12
Iron, pig and bloom .....	43,371	68,694	110,965	1.51
Iron and steel rails .....	5,604	8,142	13,746	0.19
Other castings and machinery .....	25,924	24,508	50,432	0.69
Bar and sheet metal .....	30,353	43,085	73,343	1.01
Cement, brick and lime .....	39,219	47,543	86,762	1.19
Agricultural implements .....	10,608	10,432	21,032	0.29
Wagons, carriages, tools, and other m'f'rs. ....	498,597	252,221	750,811	10.39
Wines, liquors and beers .....	12,633	16,535	29,458	0.41
Household goods and furniture .....	16,301	13,267	29,568	0.41
<b>Miscellaneous:</b>				
Other commodities not mentioned above. ....	320,789	377,060	697,869	9.59
<b>Total tonnage .....</b>	<b>3,492,349</b>	<b>3,783,921</b>	<b>7,276,270</b>	<b>100</b>

## FREIGHT TRAFFIC MOVEMENT.—IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	245,185	302,657	547,842	9.54
Flour.....	105,504	69,572	175,076	3.06
Other mill products.....	45,020	42,271	87,291	1.57
Hay.....	44,012	40,505	84,517	1.47
Tobacco.....	808	7,367	8,175	0.14
Cotton.....	73,686	49,094	122,780	2.13
Fruit and vegetables.....	73,686	70,455	144,141	2.51
Potatoes and other agricultural products.....	54,268	43,865	98,133	1.71
<b>Products of animals:</b>				
Live stock.....	66,899	101,691	168,590	2.94
Dressed meats.....	104,922	79,226	184,148	3.22
Other packing house products.....	73,509	91,968	165,477	2.97
Poultry, game and fish.....	3,573	4,274	7,847	0.13
Wool.....	1,909	4,118	6,027	0.10
Hides and leather.....	7,541	11,400	18,941	0.34
<b>Products of mines:</b>				
Anthracite coal.....		300,968	300,968	5.24
Bituminous coal.....		658,912	658,912	11.52
Coke and charcoal.....	8,454	17,547	26,001	0.45
Ores.....		8,535	8,535	0.15
Stone, sand and other like articles.....	135,849	47,608	183,457	3.20
Salt.....	51,601	12,565	64,166	1.12
<b>Products of forest:</b>				
Lumber.....	366,593	160,710	527,303	9.19
Logs and other forest products.....	617,178	119,432	736,610	12.83
<b>Manufactures:</b>				
Petroleum and other oils.....	83,636	114,165	197,801	3.45
Sugar.....	10,935	50,288	61,223	1.07
Iron, pig and bloom.....	39,133	65,240	104,373	1.82
Iron and steel rails.....	4,297	7,622	11,919	0.22
Other castings and machinery.....	24,240	20,526	44,766	0.78
Bar and sheet metal.....	16,576	36,372	52,947	0.92
Cement, brick, and lime.....	35,724	37,573	73,297	1.25
Agricultural implements.....	9,712	9,636	19,348	0.34
Wagons, carriages, tools, and other manufac- tures.....	321,892	238,775	560,667	9.77
Wines, liquors, and beers.....	7,740	13,634	21,374	0.37
Household goods and furniture.....	18,751	10,610	29,361	0.52
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	59,535	222,908	282,443	4.90
<b>Total tonnage.....</b>	<b>2,641,783</b>	<b>3,097,860</b>	<b>5,739,643</b>	<b>100</b>

## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The American Express Company do a business over the lines of the Michigan Central Railroad Company, for which the following rates of compensation are paid, with the guarantee that said compensation will amount to not less than \$22,400 per month.

On all tonnage carried.	Pay on local merchandise. Per cwt.	Pay on through or foreign merchandise. Per cwt.	Pay on all produce. Per cwt.
1 to 10 miles.....	\$0 15	\$0 10	\$0 10
11 to 32 ".....	15	15	15
33 to 50 ".....	20	15	15
51 to 76 ".....	25	20	20
77 to 100 ".....	30	25	25
101 to 120 ".....	35	30	30
121 to 145 ".....	45	35	35
146 to 175 ".....	50	40	40
176 to 255 ".....	60	50	50
256 to 275 ".....	60	60	50
276 to 300 ".....	65	65	50
301 to 510 ".....	75	75	50
511 to 650 ".....	80	80	50

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

	Miles.
Michigan Central R. R. ....	1,284.10
M. C. R. R. & Western Union Telegraph Co. ....	279.00
Western Union Telegraph Co. ....	5,487.54
Canada Southern R'y .....	1,163.71
Great Northwestern Telegraph Co. ....	352.60
	<u>8,576.95</u>

## TRANSPORTATION COMPANIES.

*Sleeping, drawing-room and palace car companies.*

What sleeping, drawing-room, chair or other palace passenger cars, not the exclusive property of your own or some other railroad company, have, during the year, been in use on your road in the State of Michigan, and on what terms? If rented by you, or allowed mileage between local points in this State, what was the amount paid for the use of such cars during the period under report?

Pullman Palace Car Co., Chicago, Ill. ....	<u>\$37 06</u>
--------------------------------------------	----------------

## ADDITIONAL QUESTIONS.

*Fast freight lines.*

To what fast freight lines, or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

Cannot furnish this information; the amount, however, is small.

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

## KILLED.

January 3, Jos. Causley, switchman, Bay City. Stepped in front of engine; Carelessness.  
 January 23, Albert Doane, trespasser, Gaylord. Crossing track; trespasser.  
 February 2, unknown man, trespasser, Niles. Walking on track.  
 February 10, Geo. Service, trespasser, Niles. Walking on track.  
 March 9, Steve Lillis, brakeman, Detroit. Lumber falling on him; accidental.



April 20, Frank Foster, conductor, Ypsilanti. Fell under cars; lack caution.  
 April 28, L. P. Oldfield, passenger, Denmark Junction. Fell off train; lack caution.  
 May 4, John Tobin, switchman, Bay City. Jumped off train; lack caution.  
 May 6, L. J. Pratt, brakeman, Eddys. Fell off train; lack caution.  
 May 9, Fred Plender, trespasser, Battle Creek. Crawled under moving train.  
 June 1, Frank Mitchell, trespasser, Lansing. Walking on track.  
 June 27, Frank Howard, trespasser, Ypsilanti. Stealing ride.  
 July 1, W. Hathway, brakeman, Kalamazoo. Fell under train; lack caution.  
 July 6, unknown man, trespasser, Ann Arbor. Struck by train.  
 July 25, Chas. Worring, trespasser, Reese. Struck by train.  
 July 30, unknown boy, trespasser, Jackson Junction. Struck by train.  
 August 8, Chris Hagelowe, trespasser, Marshall. Driving on track.  
 August 20, A. Tenbrook, trespasser, Galesburg. Struck by train.  
 August 22, unknown man, trespasser, Bedford. Struck by train.  
 September 1, unknown man, trespasser, Vandalia. Found dead on track.  
 September 12, unknown man, trespasser, Yassar. Stealing ride.  
 September 18, unknown man, trespasser, Ypsilanti. Stealing ride.  
 October 19, D. Pankey (boy), trespasser, Ann Arbor. Jumping on train.  
 December 6, unknown man, trespasser, Town Line. Walking on track.  
 December 23, Joe. Broughton, Jackson. Driving across track; carelessness.

## INJURED.

January 23, Joe Davis, car repairer, Mackinaw. Car wheel fell on his foot; lack caution.  
 January 24, C. E. Johnson, brakeman, Rives Junction. Coupling; carelessness.  
 February 14, Fred Knox, Wasopi. Driving across track; lack of caution.  
 February 15, Fred Martin, Saginaw. Driving across track; accidental.  
 February 15, Louis Martin, Saginaw. Driving across track; accidental.  
 February 15, Edward Martin, Saginaw. Driving across track; accidental.  
 February 15, George Bordeman, Saginaw. Driving across track; accidental.  
 February 26, Hort French, trespasser, Detroit. Walking on track.  
 February 26, Jas. Dixie, trespasser, Wayne. Walking on track.  
 March 5, T. Bowles, brakeman, Rives Junction. Fell off car; lack caution.  
 March 7, E. B. Volght, brakeman, Ypsilanti. Coupling; carelessness.  
 March 9, M. Gregory, brakeman, Battle Creek. Fell off train; lack caution.  
 March 13, J. G. Martin, switchman, Junction Yards. Coupling; carelessness.  
 April 12, Moses Strong, trespasser, Rochester. Stealing ride.  
 April 13, F. S. Long, passenger, Detroit. Attempted to jump on train while in motion; carelessness.  
 April 15, unknown man, trespasser, Otter Lake. Walking on track.  
 June 6, Peter Rypockie, laborer, Hauptman. Working on road train; lack caution.  
 July 15, Thomas Bowles, brakeman, Leslie. Struck by car; lack caution.  
 July 21, Fred Kittenfort, brakeman, Detroit. Coupling; carelessness.  
 August 5, Isaac Dent, switchman, Detroit. Fell off car; lack caution.  
 August 7, Wm. Rex, trespasser, Junction Yards. Ties falling on him.  
 August 8, Joe Sherman, trespasser, Oronogo. Struck by train.  
 August 11, H. W. Johnson, brakeman, Junction Yards. Coupling; lack caution.  
 August 13, C. Sullivan, section man, Mackinaw. Fell off hand car; lack caution.  
 September 2, R. McElrann, trespasser, Detroit. Jumping on cars.  
 September 8, W. Kline, brakeman, Three Rivers. Fell off train; lack caution.  
 August 13, Harry Bean, brakeman, Mason. Fell off train; lack caution.  
 August 26, Wm. Henderson, brakeman, Bay City Junction. Coupling; carelessness.  
 September 9, Joe Barlow, brakeman, Hauptman. Cant hook caught his leg; accidental.  
 September 11, Joe Swartz, brakeman, Monroe. Coupling; carelessness.  
 September 13, J. Shields, switchman, Grand Rapids. Coupling; carelessness.  
 September 17, Wm. Green, switchman, Saginaw. Coupling; carelessness.  
 September 18, Mrs. McCormick, passenger, West Bay City. Fell off train; carelessness.  
 September 19, Wm. Zane, brakeman, Barro Lake. Fell off way car; lack of caution.  
 September 25, B. Winchell, brakeman, Bay City. Log fell off train; accidental.  
 September 27, Wm. Nolan, switchman, Saginaw. Fell from train; lack caution.  
 September 27, Geo. Sullivan, brakeman, Junction Yards. Jumping train; carelessness.  
 October 1, J. Walsh, switchman, Junction Yards. Hit by car stake; carelessness.  
 October 1, W. E. Cornell, passenger, Oxford. Getting on train; carelessness.  
 October 9, H. Beau Egan. Struck by telegraph signal; lack caution.  
 October 9, F. E. Parsons, brakeman, Indian River. Falling off car; lack caution.  
 October 14, T. J. Tompason, trespasser, Kalamazoo. Stealing ride.  
 October 15, Wm. Fitzgerald, switchman, Bay City Junction. Jumping off train; lack caution.  
 October 18, Frank Holly, switchman, Mackinaw. Coupling; lack caution.  
 October 21, Jacob Frey, switchman, Junction Yards. Fell off car; lack caution.  
 October 22, Joe Angus, trespasser, Junction Yards. Climbing on cars.  
 October 23, Chas. Cushman, brakeman, Alger. Coupling; carelessness.  
 October 24, J. L. Bradley, brakeman, Wolverine. Coupling; carelessness.  
 October 28, C. Holly, brakeman, Mackinaw. Falling off car; lack of caution.  
 November 6, W. Richards, trespasser, Jackson. Stealing ride.  
 November 11, B. Randall, brakeman, Jordans. Fell from train; lack of caution.  
 November 12, Geo. Wilson, brakeman, Rochester. Coupling; carelessness.  
 November 20, Mike Smith, sectionman, Delray. Fell off hand car; carelessness.  
 November 24, G. Kull, trespasser, Saginaw. Walking on track.  
 December 2, E. Thompson, sectionman, Bushville. Struck by train; carelessness.  
 December 2, M. Matthews, sectionman, Bushville. Struck by train; carelessness.  
 December 4, J. T. Hutchinson, switchman, Junction yards. Fell off car; lack of caution.  
 December 6, T. Cassidy, switchman, Junction Yards. Coupling; carelessness.  
 December 9, Frank Bowen, passenger, Rives Junction. Trunk fell on him; accidental.  
 December 11, J. Johnson, switchman, W. Bay City. Ran nail in foot.  
 December 13, M. Herux, switchman, W. Bay City. Link broke; accidental.  
 December 14, Jas. Friend, trespasser, Vanderbilt. Jumping on train.  
 December 14, H. Delarge, trespasser, Detroit. Struck by train.

## MICHIGAN RAILROAD RETURNS, 1896.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Coupling cars.....					14	
Falling from trains.....	1	3		1	12	
Getting on and off trains.....		1		2	2	
Highway crossings.....						5
Miscellaneous.....		2		1	12	1
Overhead obstructions.....					1	
Trespassers on trains.....			4			6
Trespassers on tracks.....			14			5
Total.....	1	6	18	4	41	18

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year.....	25
Number of persons injured during the year.....	63
Number of casualties purely accidental.....	10
Number resulting from lack of caution, carelessness, or misconduct.....	48
Trespassers and tramps killed or injured.....	30

## CLASSIFICATION OF EMPLOYÉS.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Brakemen.....	3	22	25
Conductors.....	1		1
Laborers.....		1	1
Yardmen.....	2	12	14
Not classified above.....		5	5
Total.....	6	40	46

STATE OF MICHIGAN, } ss.  
COUNTY OF WAYNE,

H. B. Ledyard, president, and A. J. Burt, auditor, of the Michigan Central Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF E. E.]

Signed,

H. B. LEDYARD, *President*,  
A. J. BURT, *Auditor*.

Subscribed and sworn to before me this 19th day of March, A. D. 1897.

[L. S.]

JOHN F. PETERS,  
*Notary Public in and for Wayne Co.*

ANNUAL REPORT  
OF THE  
BATTLE CREEK & STURGIS RAILWAY COMPANY,

*For the year ending December 31, 1896.*

[Filed March 19, 1897.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, H. B. LEDYARD, Detroit, Mich.  
*Secretary*, A. J. BURT, Detroit, Mich.  
*Vice President*, HENRY RUSSEL, Detroit, Mich.

DIRECTORS.

E. C. NICHOLS, Battle Creek, Mich.  
C. VANDERBILT, New York City.  
E. D. WORCESTER, New York City.  
H. B. LEDYARD, Detroit, Mich.  
ASHLEY POND, Detroit, Mich.  
HENRY RUSSEL, Detroit, Mich.  
A. J. BURT, Detroit, Mich.  
Terms expire when successors are elected.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: November 14, 1889.  
Date of annual meeting of stockholders: First Wednesday in June.  
Fiscal year of company ends December 31.  
General offices of the company are located at Detroit, Mich.

REMARKS.

The stock is owned and the road is operated part by the Lake Shore & Michigan Southern and part by the Michigan Central Railroad Companies.

ANALYSIS OF CAPITAL STOCK.

Amount authorised by charter or articles of association .....		\$1,000,000 00
Par value of shares .....	\$100 00	
Average price received per share .....	100 00	
Number of shares issued .....	5,000	
Amount paid in on common .....		\$500,000 00
Total amount paid in as per books of the company .....		\$500,000 00
Paid in per mile of road owned by company, 41 miles .....		12,195 12

## MICHIGAN RAILROAD RETURNS, 1896.

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage, Dec. 1, 1889.....	3%	Dec. 1, 1899.....	New York City...	\$500,000 00

## RECAPITULATION.

Total funded debt.....	\$500,000 00
Total debt liabilities.....	\$500,000 00
Total amount of stock and debt.....	1,000,000 00
Stock and debt per mile of road.....	24,390 24

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year .....	\$15,000 00
Was it paid for the last year? Yes.	

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

The road was built by a former company, the records of which cannot be found, making it impossible to furnish this information.

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
January, 1889.

## MAIN LINE.

	Miles.	Miles.
Length completed in Michigan, Battle Creek to Findley, operated by M. C. R. R. ....	33.80	
Length completed in Michigan, Findley to Sturgis, operated by L. S. & M. S. R. y. ....	7.20	
Total length completed.....		41.00

## BRANCHES.

Total length of road belonging to this company .....	41.00	41.00
Total length of road belonging to this company in Michigan .....	41.00	
Aggregate length of sidings, spurs, and other track not above enumerated.....		4.01
Same in Michigan .....	4.01	
Aggregate length of tracks belonging to this company, computed as single track .....		45.01
Same in Michigan .....		45.01
Gauge of track, 4 feet 8½ inches.		

STATE OF MICHIGAN, }  
COUNTY OF WAYNE, } ss.

H. B. Ledyard, president, A. J. Burt, secretary, of the Battle Creek & Sturgis Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

H. B. LEDYARD, *President.*  
A. J. BURT, *Secretary.*

Subscribed and sworn to before me this 19th day of March, A. D. 1897.

[L. S.]

JOHN F. PETERS,  
*Notary Public in and for Wayne Co.*

ANNUAL REPORT  
OF THE  
BAY CITY & BATTLE CREEK RAILWAY COMPANY,

*For the year ending December 31, 1896.*

[Filed March 31, 1897.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President, H. B. LEDYARD, Detroit, Mich.*  
*Secretary, A. J. BURT, Detroit, Mich.*  
*Vice President, HENRY RUSSEL, Detroit, Mich.*

DIRECTORS.

C. VANDERBILT, New York City.  
E. D. WORCESTER, New York City.  
H. B. LEDYARD, Detroit, Mich.  
HUGH McMILLAN, Detroit, Mich.  
ASHLEY POND, Detroit, Mich.  
HENRY RUSSEL, Detroit, Mich.  
A. J. BURT, Detroit, Mich.

Terms expire when successors are elected.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: November 14, 1889.  
Date of annual meeting of stockholders: First Wednesday in June.  
Fiscal year of company ends, December 31.  
General offices of the company are located at Detroit, Mich.

REMARKS.

The stock is owned and the road operated by the Michigan Central Railroad Company,

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$1,000,000 00
Par value of shares .....	\$100 00	
Average price received per share .....	100 00	
Number of shares issued.....	3,000	
Amount paid on common .....	\$300,000 00	

Total amount paid in, as per books of the company.....		300,000 00
Paid in per mile of road owned by company, 18 miles .....		16,666 66

ANALYSIS OF DEBT ACCOUNTS.

FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage, Dec. 1, 1889.....	3%	Dec. 1, 1899.....	New York City...	\$250,000 00

## MICHIGAN RAILROAD RETURNS, 1896.

## RECAPITULATION.

Total funded debt .....	\$250,000 00
Total debt liabilities .....	250,000 00
Total amount of stock and debt .....	550,000 00
Stock and debt per mile of road .....	80,555 54

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year .....	\$7,500 00
Was it paid for the last year? Yes.	

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road, and branches built by company.*

This road was built by a former company, the records of which cannot be found, making it impossible to furnish this information.

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
West Bay City to Midland.

## MAIN LINE.

	Miles.	Miles.
Length completed in Michigan .....	18.00	
Total length of road belonging to this company .....		18.00
Aggregate length of sidings, spurs, and other tracks not above enumerated .....		2.41
Aggregate length of tracks belonging to this company, computed as single track .....		20.41
Same in Michigan .....	20.41	

Gauge of track, 4 feet 8½ inches.

STATE OF MICHIGAN, } ss.  
COUNTY OF WAYNE, }

H. B. Ledyard, president, and A. J. Burt, secretary, of the Bay City & Battle Creek Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

Signed,

[L. S. OF R. R.]

H. B. LEDYARD, *President*,  
A. J. BURT, *Secretary*.

Subscribed and sworn to before me this 19th day of March, A. D., 1897.

[L. S.]

JOHN. F. PETERS,  
*Notary Public in and for Wayne Co.*

ANNUAL REPORT  
OF THE  
CANADA SOUTHERN BRIDGE COMPANY,

*For the year ending December 31, 1896.*

[Filed March 31, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, JAMES TILLINGHAST, New York, N. Y.  
*Secretary and Treasurer*, CHARLES F. COX, New York, N. Y.  
*Transfer Agent*, HENRY B. AYERS, New York, N. Y.

DIRECTORS.

CORNELIUS VANDERBILT, New York, N. Y.  
WILLIAM K. VANDERBILT, New York, N. Y.  
JAMES TILLINGHAST, Buffalo, N. Y.  
SAMUEL F. BARGER, New York, N. Y.  
CHARLES F. COX, New York, N. Y.  
EDWIN D. WORCESTER, New York, N. Y.  
EDWIN A. WICKES, New York, N. Y.  
CHAUNCEY M. DEFEW, New York, N. Y.  
HENRY B. LEDYARD, Detroit, Mich.

Term expires June, 1897.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: Consolidated, August 20, 1873.  
Number of stockholders at date of last election: 16.  
Number of stockholders in Michigan at same date: 3.  
Amount of full paid stock held in Michigan at same date: \$6,000 (60 shares).  
Date of annual meeting of stockholders: First Thursday after first Wednesday in June.  
Fiscal year of company ends, December 31.  
General offices of the company are located at Detroit, Mich.

REMARKS:

The stock is controlled by the Canada Southern Railway Company, and the road, bridge, etc., are operated by the Michigan Central Railroad Company as part of the Canada Southern system of roads, under an agreement for joint operation made December 12, 1882, between the Michigan Central and Canada Southern companies.

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$1,500,000 00
Par value of shares.....	\$100 00	
Average price received per share.....	100 00	
Number of shares issued.....	4,500	
Amount paid in on common.....		\$450,000 00
Total amount paid in as per books of the company.....		450,000 00
Paid in per mile of road owned by company, 3.66 miles .....		<u>122,950 82</u>

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mort. coupon bonds dated Feb. 1, 1874	7%	Feb. 1, 1904.....	New York, N. Y....	\$1,000,000 00
Total funded debt.....				\$1,000,000 00

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated.	Amount.
For miscellaneous.....		\$1,540,000 00
For current balances.....		162,478 89
Total unfunded debt.....		\$1,702,478 89

## RECAPITULATION.

Total funded debt.....	\$1,000,000 00
Total unfunded debt.....	1,702,478 89
Total debt liabilities.....	\$2,702,478 89
Total amount of stock and debt.....	<u>3,152,478 89</u>

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year..... \$70,000 00

Was it paid for the last year?  
No.

If interest is in default state the years and amounts as follows:  
Coupons due 1875 to 1896, inclusive, at \$70,000.00 per annum.

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction..... \$1,780,977 05

Proportion of cost of construction for Michigan: All.

## DESCRIPTION OF ROAD.

Date when the road and bridge were opened for use between their present termini:  
September, 1873.

MAIN LINE.		Miles.	Miles.
Length completed in Michigan.....		3.66	
Total length completed.....			3.66
Total length of road belonging to this company.....			3.66
Total length of road belonging to this company in Michigan.....	3.66		
Aggregate length of sidings, spurs, and other tracks not above enumerated.....			1.75
Same in Michigan.....	1.75		
Aggregate length of tracks belonging to this company computed as single track.....			5.41
Same in Michigan.....	5.41		
Gauge of track, 4 feet 8½ inches.			



STATE OF NEW YORK, }  
COUNTY OF NEW YORK, } ss.

Charles F. Cox, treasurer and secretary, of the Canada Southern Bridge Company, being duly sworn deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declares them to be a true, full and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of his knowledge and belief.

[L. s. OF R. R.]

Signed,

C. F. COX, *Treasurer and Secretary.*

Subscribed and sworn to before me this 3d day of March, A. D. 1897.

[L. s.]

EDGAR FREEMAN,  
*Notary Public.*

ANNUAL REPORT  
OF THE  
DETROIT & BAY CITY RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed March 31, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President, C. VANDERBILT, New York City.  
Secretary, E. D. WORCESTER, New York City.  
Vice President, H. B. LEDYARD, Detroit, Mich.*

DIRECTORS.

C. VANDERBILT, New York City.  
W. K. VANDERBILT, New York City.  
H. B. LEDYARD, Detroit, Mich.  
C. M. DEFEW, New York City.  
S. F. BARGER, New York City.

Terms expire when successors are elected.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: February 26, 1881.  
Number of stockholders at date of last election: 7.  
Number of stockholders in Michigan at same date: 3.  
Amount of full paid stock held in Michigan at same date: \$300.00  
Date of annual meeting of stockholders: First Thursday after first Wednesday in May.  
Fiscal year of company ends December 31.  
General offices of the company are located at Detroit, Mich., and New York City,

REMARKS.

Under an agreement dated March 10, 1881, the Detroit & Bay City Railroad Company transferred the possession and control of its railroad and property to the Michigan Central Railroad Company. The latter company agreed to operate the same during its corporate existence. Under the terms of this agreement, the Michigan Central Railroad Company is authorized and agrees to issue its bonds to the amount of \$4,000,000, and both companies have joined in the execution of a mortgage upon all the Detroit & Bay City Railroad Company's property to secure the payment of said bonds.

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association .....		\$2,000,000 00
Par value of shares .....	\$100 00	
Average price received per share .....	100 00	
Number of shares issued .....	20,000	
Amount paid in on common .....	2,000,000 00	
Total amount paid in, as per books of the company .....		\$2,000,000 00
Paid in per mile of road owned by company, 149.90 miles .....		<u>18,342 23</u>

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

The Michigan Central Railroad Company has issued its bonds to the amount of \$4,000,000, secured by a first mortgage on the property of this company.

## RECAPITULATION.

Total amount of stock and debt.....	\$2,000,000 00
Stock and debt per mile of road.....	13,342 23

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
Detroit to Bay City, July 31, 1873.

MAIN LINE.		Miles.	Miles.
Length completed in Michigan.....		109.00	
Total length completed.....			109.00
BRANCHES.			
Saginaw branch, from Denmark Junction to E. Saginaw.....		16.75	
Caro branch, from Vassar to Caro.....		12.75	
Detroit Belt Line.....		4.89	
Bay City Belt Line.....		7.01	
Total length of branches owned by company.....			40.90
Total length of branches owned by company in Michigan.....		40.90	
Total length of road belonging to this company.....			149.90
Total length of road belonging to this company in Michigan.....		149.90	
Bay City Street E'y (leased).....		5.10	
Aggregate length of sidings, spurs, and other tracks not above enumerated.....			63.55
Same in Michigan.....		63.55	
Aggregate length of tracks belonging to this company, computed as single track.....			213.45
Same in Michigan.....		213.45	

Gauge of track: 4 feet 8½ inches.

STATE OF MICHIGAN, } ss.  
COUNTY OF WAYNE, }

H. B. Ledyard, Vice President of the Detroit & Bay City Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declares them to be a true, full and correct statement of the stock, debt and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of his knowledge and belief.

[L. S. OF R. R.]

Signed,

H. B. LEDYARD, Vice President.

Subscribed and sworn to before me this 19th day of March, A. D. 1897.

[L. S.]

JOHN F. PETERS,

Notary Public in and for Wayne Co.

ANNUAL REPORT  
OF THE  
DETROIT, DELRAY & DEARBORN RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed March 31, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, H. B. LEDYARD, Detroit, Mich.  
*Secretary*, A. J. BURT, Detroit, Mich.  
*Vice President*, HENRY RUSSEL, Detroit, Mich.

DIRECTORS.

H. B. LEDYARD, Detroit, Mich.  
ASHLEY POND, Detroit, Mich.  
HENRY RUSSEL, Detroit, Mich.  
A. J. BURT, Detroit, Mich.  
A. TORREY, Detroit, Mich.  
Terms expire when successors are elected.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: September 19, 1895.  
Number of stockholders at date of last election: 7.  
Number of stockholders in Michigan at same date: 7.  
Amount of full paid stock held in Michigan at same date: \$3,500.00.  
Date of annual meeting of stockholders: No date set.  
Fiscal year of company ends December 31.  
General offices of the company are located at Detroit, Mich.

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$50,000 00
Par value of shares.....	\$100 00	
Average price received per share.....	100 00	
Number of shares issued.....	35	
Amount paid in on common.....		\$3,500 00
Total amount paid in, as per books of the company.....		\$3,500 00
Paid in per mile of road owned by company, 4.84 miles.....		725 21

ANALYSIS OF DEBT ACCOUNTS.

UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated.	Amount.
For construction.....		\$42,751 96

## RECAPITULATION.

Total unfunded debt .....	\$42,751 98
Total debt liabilities.....	\$42,751 98
Amount of debt liabilities per mile of road (4.84 miles) .....	8,838 05
Total amount of stock and debt .....	46,251 98
Stock and debt per mile of road .....	9,556 19

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction.....	\$46,251 98
Average cost of construction per mile of road (not including sidings), 4.84 miles .....	9,556 19
Proportion of cost of construction for Michigan.....	46,251 98

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
October 5, 1895.

	MAIN LINE.	Miles.	Miles.
Length completed in Michigan.....	4.84		
Total length completed .....			4.84
Total length of road belonging to this company .....			4.84
Total length of road belonging to this company in Michigan.....	4.84		
Aggregate length of sidings, spurs, and other tracks not above enumerated.....			.32
Aggregate length of tracks belonging to this company, computed as single track.....			5.16
Same in Michigan.....	5.16		
Gauge of track, 4 feet 8½ inches.			

STATE OF MICHIGAN, } ss.  
COUNTY OF WAYNE,

H. B. Ledyard, president, and A. J. Burt, secretary, of the Detroit, Delray & Dearborn Railroad Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full and correct statement of the stock, debt and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

H. B. LEDYARD, *President.*  
A. J. BURT, *Secretary.*

Subscribed and sworn to before me this 19th day of March, A. D. 1897.

[L. S.]

JOHN F. PETERS,  
*Notary Public in and for Wayne Co.*

**ANNUAL REPORT**  
OF THE  
**GRAND RIVER VALLEY RAILROAD COMPANY,**

*For the year ending December 31, 1896.*

[Filed March 31, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President, JOHN M. ROOT, Jackson, Mich.*  
*Secretary, E. W. BARBER, Jackson, Mich.*  
*Treasurer, E. W. BARBER, Jackson, Mich.*

**DIRECTORS.**

J. M. ROOT, Jackson, Mich.  
E. W. BARBER, Jackson, Mich.  
W. H. WITTINGTON, Jackson, Mich.  
ALO. BENNETT, Jackson, Mich.  
E. S. LACEY, Chicago, Ill.  
NATHAN BARLOW, Hastings, Mich.  
H. G. BARBER, Vermontville, Mich.

Terms expire October 5, 1897.

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: May 11, 1894.  
Number of stockholders at date of last election: 45.  
Number of stockholders in Michigan at same date: 20.  
Amount of full paid stock held in Michigan at same date: \$144,700.00.  
Date of annual meeting of stockholders: First Monday in October.  
Fiscal year of company ends December 31.  
General offices of the company are located at Jackson, Mich.

**REMARKS.**

Operated by the Michigan Central Railroad Company under an agreement for and during the life-time of articles of association—999 years.  
First organized under special charter May 4, 1846; reorganized under general railroad law of Michigan April 25, 1894, and articles of association filed May 11, 1894.

**ANALYSIS OF CAPITAL STOCK.**

Amount authorized by charter or articles of association.....		\$1,000,000 00
Par value of shares.....	\$100 00	
Average price received per share.....	100 00	
Number of shares issued.....	4,912	
Amount paid in on common.....	\$491,200 00	
Total amount paid in, as per books of the company.....		491,200 00
Paid in per mile of road owned by company.....		<u>5,862 27</u>

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage on road to secure bonds of Michigan Central (not a debt of this Co.)	6%	Sept. 1, 1909.....	New York City ..	\$1,500,000 00

## RECAPITULATION.

Total mortgage.....	\$1,500,000 00
Total mortgage liabilities.....	\$1,500,000 00
Total amount of stock and mortgage.....	1,991,200 00
Stock and debt per mile of road.....	23,762 27

## INTEREST ON MORTGAGE.

What is the amount of same due each year.....	\$90,000 00
-----------------------------------------------	-------------

## COST OF ROAD AND EQUIPMENT.

## TOTAL COST FOR CONSTRUCTION AND EQUIPMENT OF ROAD AND BRANCHES BUILT BY COMPANY.

*Total expended for construction.....	\$2,867,053 00
Average cost of construction per mile of road (not including sidings) 83.79 miles.....	34,229 17
Proportion of cost of construction for Michigan: All in Michigan.	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini: 1870.

MAIN LINE.	Miles.	Miles.
Length completed in Michigan.....	83.79	
Total length completed.....		83.79

## BRANCHES.

Aggregate length of sidings, spurs and other tracks not above enumerated.....	16.78	16.78
Same in Michigan.....	16.78	
Aggregate length of tracks belonging to this company, computed as single track.....	100.57	100.57
Same in Michigan.....	100.57	

Gauge of track, 4 feet 8½ inches.

STATE OF MICHIGAN, } ss.  
COUNTY OF JACKSON, }

J. M. Root, president, and E. W. Barber, secretary, of the Grand River Valley Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

J. M. ROOT, President.

E. W. BARBER, Secretary.

Subscribed and sworn to before me this 17th day of February, A. D. 1897.

A. W. MCGEE,  
Notary Public.

\*Of this total \$1,500,000.00 included in report of Michigan Central on account of leased lines.

ANNUAL REPORT  
OF THE  
JACKSON, LANSING & SAGINAW RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed March 31, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, HENRY B. LEDYARD, Detroit, Mich.  
*Secretary*, ORLANDO M. BARNES, Lansing, Mich.  
*Treasurer*, WM. M. THOMPSON, Jackson, Mich.

DIRECTORS.

CORNELIUS VANDERBILT, New York City.  
HENRY B. LEDYARD, Detroit, Mich.  
HENRY B. JOY, Detroit, Mich.  
WM. M. THOMPSON, Jackson, Mich.  
HENRY HAYDEN, Jackson, Mich.  
ORLANDO M. BARNES, Lansing, Mich.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: February 23, 1884.  
Number of stockholders at date of last election: 57.  
Number of stockholders in Michigan at same date: 23.  
Amount of full paid stock held in Michigan at same date: \$1,464,300 or 14,643 shares.  
Date of annual meeting of stockholders: Second Tuesday of January.  
Fiscal year of company ends: Calendar year.  
General offices of the company are located at Lansing, Mich.

REMARKS.

The Michigan Central Railroad Company operates the company's road under agreement which went into operation September 1, 1871.

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$2,500,000 00
Par value of shares.....	\$100 00	
Average price received per share.....	100 00	
Number of shares issued.....	20,000	
Amount paid in on common.....		2,000,000 00
Total amount paid in, as per books of company.....		2,000,000 00
Paid in per mile of road owned by company.....		<u>6,777 36</u>



## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini: December 31, 1882.

MAIN LINE.		Miles.	Miles.
Length completed in Michigan .....		295.10	
Total length completed .....			295.10

BRANCHES.			
Twin Lakes branch, from Grayling to Twin Lakes.....	27.80		
Total length of branches owned by company .....			27.80
Total length of road belonging to this company in Michigan .....	322.90		
Aggregate length of of sidings, spurs, and other tracks not above enumerated .....			234.23
Same in Michigan .....	234.23		
Aggregate length of tracks belonging to this company, computed as single track .....			557.13
Same in Michigan .....	557.13		
Gauge of track, 4 feet, 8½ inches.			

STATE OF MICHIGAN, } ss.  
COUNTY OF INGHAM, }

Orlando M. Barnes, secretary, of the Jackson, Lansing & Saginaw Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declares them to be a true, full, and correct statement of the stock, debt and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1886, to the best of his knowledge and belief.

[L. S. OF R. R.]

Signed,

ORLANDO M. BARNES, *Secretary*.

Subscribed and sworn to before me this 4th day of February, A. D. 1897.

[L. S.]

C. J. DAVIS,

*Notary Public, Ingham Co., Mich.*

ANNUAL REPORT  
OF THE  
KALAMAZOO & SOUTH HAVEN RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed March 31, 1897.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President, ASHLEY POND, Detroit, Mich.*  
*Secretary, A. J. BURT, Detroit, Mich.*

DIRECTORS.

C. VANDERBILT, New York City.  
ASHLEY POND, Detroit, Mich.  
H. B. LEDYARD, Detroit, Mich.  
HENRY RUSSEL, Detroit, Mich.  
A. J. BURT, Detroit, Mich.  
F. S. WINSTON, Chicago, Ill.

Terms expire when successors are elected.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: April 15, 1869.  
Number of stockholders at date of last election: 199.  
Number of stockholders in Michigan at same date: 124.  
Amount of full paid stock held in Michigan at same date: \$325,100.  
Date of annual meeting of stockholders: Second Wednesday in March.  
Fiscal year of company ends: December 31st.  
General offices of the company are located at Detroit, Mich.

REMARKS.

Leased to the Michigan Central Railroad Company, July 1, 1870, and is operated by it. The Michigan Central Railroad Company owns a majority of the capital stock.

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$500,000 00
Par value of shares.....	\$100 00	
Average price received per share.....	100 00	
Number of shares issued.....	3,254	
Amount paid in on common.....		\$325,400 00
Total amount paid in as per books of the company.....		\$325,400 00
Paid in per mile of road owned by company, 39.50 miles.....		8,287 97

# KALAMAZOO & SOUTH HAVEN RAILROAD COMPANY. 399

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

The Michigan Central Railroad Company has issued its bonds to the amount of \$700,000, secured by a first mortgage on the property of this company, and pays the interest thereon as rent.

### RECAPITULATION.

Total amount of stock and debt .....	\$325,400 00
Stock and debt per mile of road .....	8,237 97

### COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction .....	\$325,400 00
Average cost of construction per mile of road (not including sidings) 39.50 miles .....	8,237 97
Proportion of cost of construction for Michigan .....	325,400 00

### DESCRIPTION OF ROAD.

Date when road was opened for use between its present termini:  
January 2, 1871.

MAIN LINE.		Miles.	Miles.
Length completed in Michigan .....		39.50	
Total length completed .....			39.50
Total length of road belonging to this company .....			39.50
Total length of road belonging to this company in Michigan .....	39.50		
Aggregate length of sidings, spurs, and other tracks not above enumerated .....			5.13
Same in Michigan .....	5.13		
Aggregate length of tracks belonging to this company, computed as single track .....			44.63
Same in Michigan .....	44.63		

Gauge of track, 4 feet, 8½ inches.

STATE OF MICHIGAN, } ss.  
COUNTY OF WAYNE, }

Ashley Pond, president, and A. J. Burt, secretary, of the Kalamazoo & South Haven Railroad Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the stock, debt and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

Signed,

[L. S. OF R. R.]

ASHLEY POND, *President.*

A. J. BURT, *Secretary.*

Subscribed and sworn to before me this 30th day of March, A. D. 1897.

[L. S.]

GEO. E. TEGART,

*Notary Public, Wayne Co., Mich.*

ANNUAL REPORT  
OF THE  
MICHIGAN AIR LINE RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed March 31, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President, H. B. LEDYARD, Detroit, Mich.*  
*Secretary and Treasurer, A. J. BURT, Detroit, Mich.*  
*Vice President, HENRY RUSSEL, Detroit, Mich.*

DIRECTORS.

C. VANDERBILT, New York City.  
H. B. LEDYARD, Detroit, Mich.  
ASHLEY POND, Detroit, Mich.  
HENRY RUSSEL, Detroit, Mich.  
E. D. WORCESTER, New York City.  
J. W. FRENCH, Three Rivers, Mich.  
A. J. BURT, Detroit, Mich.  
Terms expire when successors are elected.

\* STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: July 14, 1868; March 19, 1870.  
Date of annual meeting of stockholders: Third Wednesday in October.  
Fiscal year of company ends: December 31.  
General offices of the company are located at Detroit, Mich.

REMARKS.

This property is under perpetual lease to the Michigan Central Railroad Company, and has been so since its construction.

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....	\$4,000,000 00	
Par value of shares.....	\$50 00	
Number of shares issued.....	7,853 $\frac{1}{2}$	

ANALYSIS OF DEBT ACCOUNTS.

The Michigan Central Railroad Company has issued its bonds to the amount of \$2,600,000 secured by a first mortgage on the property of this company, and pays the interest thereon.

† COST OF ROAD AND EQUIPMENT.

\* The Michigan Central now owns a majority of the stock and controls the property; the books were received in such an imperfect condition that the present management is unable to furnish all the information required by this form.

† Not known.

DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
January, 1871.

MAIN LINE.		Miles.	Miles.
Length completed in Michigan .....		109.10	
Length completed in Indiana .....		6.06	
Total length completed .....			115.16
Total length of road belonging to this company .....			115.16
Total length of road belonging to this company in Michigan .....		109.10	
Aggregate length of sidings, spurs, and other tracks not above enumerated .....			24.31
Same in Michigan .....		22.29	
Aggregate length of tracks belonging to this company, computed as single track .....			139.47
Same in Michigan .....		131.39	

Gauge of track, 4 feet 8½ inches.

STATE OF MICHIGAN, } ss.  
COUNTY OF WAYNE, }

H. B. Ledyard, president, and A. J. Burt, secretary, of the Michigan Air Line Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

H. B. LEDYARD, President.  
A. J. BURT, Secretary.

Subscribed and sworn to before me this 19th day of March, A. D. 1897.

JOHN F. PETERS,  
Notary Public in and for Wayne Co.

# ANNUAL REPORT OF THE MICHIGAN MIDLAND & CANADA RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed March 31, 1897.]

## OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, JAMES TILLINGHAST, New York, N. Y.  
*Secretary and Treasurer*, CHARLES F. COX, New York, N. Y.  
*Transfer Agent*, HENRY B. AYERS, New York, N. Y.

## DIRECTORS.

CORNELIUS VANDERBILT, New York, N. Y.  
 WM. K. VANDERBILT, New York, N. Y.  
 JAMES TILLINGHAST, Buffalo, N. Y.  
 SAMUEL F. BARGER, New York, N. Y.  
 CHARLES F. COX, New York, N. Y.  
 EDWIN D. WORCESTER, New York, N. Y.  
 EDWARD A. WICKS, New York, N. Y.  
 CHAUNCEY M. DEPEW, New York, N. Y.  
 CHARLES C. CLARKE, New York, N. Y.

Terms expire June, 1897.

## STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: September 17, 1872.  
 Number of stockholders at date of last election: Twenty-eight.  
 Number of stockholders in Michigan at same date: Four.  
 Amount of full paid stock held in Michigan at same date: One hundred and twelve shares (\$11,200.)  
 Date of annual meeting of stockholders: First Thursday after first Wednesday in June.  
 Fiscal year of company ends December 31.  
 General offices of the company are located at Detroit, Mich.

## REMARKS.

The stock is controlled by the Canada Southern Railway Company, and the road is operated by the Michigan Central Railroad Company as a part of the Canada Southern system of roads, under an agreement for joint operation, made December 12, 1882, between the Michigan Central and Canada Southern Companies.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association .....	\$400,000 00
Par value of shares .....	\$100 00
Average price received per share .....	100 00
Number of shares issued .....	3,000
Amount paid in on common .....	300,000 00
 Total amount paid in as per books of the company .....	 \$300,000 00
 Paid in per mile of road owned by company, 14.68 miles .....	 <u>20,435 96</u>

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage coupon bonds dated July 1, 1873, and scrip.....	7%	July 1, 1900.....	New York, N. Y..	\$323,635 00

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated.	Amount.
Interest on bonds.....		\$507,605 00
For current balances.....		97,745 72
Total unfunded debt.....		\$605,350 72

## RECAPITULATION.

Total funded debt.....	\$323,635 00
Total unfunded debt.....	605,350 72
Total debt liabilities.....	\$928,985 72
Amount of debt liabilities per mile of road, 14.68 miles.....	63,282 40
Total amount of stock and debt.....	1,228,985 72
Stock and debt per mile of road, 14.68 miles.....	83,718 37

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year .....	22,610 00
Was it paid for the last year? No.	

If interest is in default state the years and amounts as follows:

1873.....	\$4,025 00
1874.....	9,765 00
1875.....	20,800 00
1876.....	21,490 00
1877 and '78, each .....	22,540 00
1879.....	22,575 00
1880 and 1896, inclusive, each year.....	22,610 00

## COST OF ROAD AND EQUIPMENT.

Total cost for construction and equipment of road, and branches built by company.

Total expended for construction.....	\$586,342 02
Average cost of construction per mile of road (not including sidings), 14.68 miles .....	39,941 56

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
December 4, 1874, St. Clair to Ridgway, Mich.

## MAIN LINE.

	Miles.	Miles.
Length completed in Michigan.....	14.68	
Total length completed .....		14.68
Total length of road belonging to this company .....		14.68
Total length of road belonging to this company in Michigan.....	14.68	
Aggregate length of sidings, spurs and other tracks not above enumerated .....		.92
Same in Michigan.....	.92	
Aggregate length of tracks belonging to this company computed as single track .....		15.60
Same in Michigan.....	15.60	

Gauge of track, 4 foot 8½ inches.

STATE OF NEW YORK, } ss.  
COUNTY OF NEW YORK, }

Charles F. Cox, treasurer and secretary of the Michigan Midland & Canada Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declares them to be a true, full and correct statement of the stock, debt and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of his knowledge and belief.

[L. S. OF E. E.]

Signed]

C. F. COX, *Treasurer and Secretary.*

Subscribed and sworn to before me this 3d day of March, A. D., 1897.

[L. S.]

EDGAR FREEMAN,  
*Notary Public.*



**ANNUAL REPORT**  
**OF THE**  
**SAGINAW BAY & NORTHWESTERN RAILROAD COMPANY,**

*For the year ending December 31, 1896.*

[Filed March 31, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President, ASHLEY POND, Detroit, Mich.*  
*Secretary, A. J. BURT, Detroit, Mich.*

**DIRECTORS.**

H. B. LEDYARD, Detroit, Mich.  
 ASHLEY POND, Detroit, Mich.  
 A. J. BURT, Detroit, Mich.  
 HENRY RUSSEL, Detroit, Mich.  
 F. J. HECKER, Detroit, Mich.

Term expires when successors are elected.

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: November 27, 1884.  
 Date of annual meeting of stockholders: First Thursday after first Wednesday in May.  
 Fiscal year of company ends December 31.  
 General offices of the company are located at Detroit, Mich.

**REMARKS.**

The stock is owned and the road is operated by the M. C. R. Co.

**ANALYSIS OF CAPITAL STOCK.**

Amount authorized by charter or articles of association.....		\$300,000 00
Par value of shares.....	\$100 00	
Average price received per share, as per books of Co.....	100 00	
Number of shares issued.....	200	
Amount paid in common.....	\$20,000 00	
Total amount paid in, as per books of company.....		20,000 00
Paid in per mile of road owned by company, 83.01 miles.....		240 93

**RECAPITULATION.**

Total amount of stock and debt.....	\$20,000 00
Stock and debt per mile of road.....	240 93

## MICHIGAN RAILROAD RETURNS, 1896.

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road, and branches built by company.*

Total expended for construction, as per books of company.....	8225,526 15
Average cost of construction per mile of road (not including sidings), 83 51 miles.....	2,716 85
Proportion of cost of construction for Michigan.....	225,526 15

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini; May, 1879.

MAIN LINE.		Miles.	Miles.
Length completed in Michigan.....		28.72	
Total length completed.....			28.72
BRANCHES.			
Sundry branches, from main line into woods.....	54.29		
Total length of branches owned by company.....			54.29
Total length of branches owned by company in Michigan.....	54.29		
Total length of road belonging to this company.....			83.01
Total length of road belonging to this company in Michigan.....	83.01		
Aggregate length of sidings, spurs, and other tracks not above enumerated.....			10.57
Same in Michigan.....	10.57		
Aggregate length of tracks belonging to this company, computed as single track.....			93.58
Same in Michigan.....	93.58		
Gauge of track, 4 feet 8½ inches.			

STATE OF MICHIGAN, } ss.  
COUNTY OF WAYNE, }

Ashley Pond, president, and A. J. Burt, secretary, of the Saginaw Bay & Northwestern Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed

ASHLEY POND, *President.*  
A. J. BURT, *Secretary.*

Subscribed and sworn to before me this 30th day of March, A. D. 1897.

GEO. E. TEGART,  
*Notary Public, Wayne Co. Mich.*

**ANNUAL REPORT**  
OF THE  
**TOLEDO, CANADA SOUTHERN & DETROIT RAILWAY  
COMPANY,**

*For the year ending December 31, 1896.*

[Filed March 31, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President, JAMES TILLINGHAST, New York, N. Y.  
Secretary and Treasurer, CHARLES F. COX, New York, N. Y.  
Transfer Agent, HENRY B. AYERS, New York, N. Y.*

**DIRECTORS.**

CORNELIUS VANDERBILT, New York, N. Y.  
WM. K. VANDERBILT, New York, N. Y.  
JAMES TILLINGHAST, Buffalo, N. Y.  
SAMUEL F. BARGER, New York, N. Y.  
CHARLES F. COX, New York, N. Y.  
EDWIN D. WORCESTER, New York, N. Y.  
EDWARD A. WICKES, New York, N. Y.  
CHAUNCEY M. DEPEW, New York, N. Y.  
ALLYN COX, New York, N. Y.

Terms expire, June, 1897.

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered, or articles of association filed: Consolidation (July 19, 1872), of the Detroit & State Line R. R. Co., of Michigan, and the Junction Railway Co. of Ohio.  
Number of stockholders at date of last election: 17.  
Number of stockholders in Michigan at same date: 2.  
Amount of full paid stock held in Michigan at same date: 10 shares (\$1,000.)  
Date of annual meeting of stockholders: First Thursday after first Wednesday in June.  
Fiscal year of company ends December 31.  
General offices of the company are located at Detroit, Mich.

**REMARKS.**

The stock is controlled by the Canada Southern Railway Company, and the road is operated by the Michigan Central Railroad Company as a part of the Canada Southern system of roads under an agreement for joint operation made December 12, 1882, between the Michigan Central and Canada Southern Companies.

**ANALYSIS OF CAPITAL STOCK.**

Amount authorized by charter or articles of association .....		\$2,000,000 00
Par value of shares .....	\$100 00	
Average price received per share .....	100 00	
Number of shares issued .....	15,476 2	
Amount paid in on common .....	\$1,547,662 50	
Total amount paid in, as per books of the company .....		1,547,662 50
Paid in per mile of road owned by company, 58 92 miles .....		<u>26,267 18</u>

**ANNUAL REPORT**  
OF THE  
**MIDLAND & HUBBARD RAILROAD COMPANY,**

*For the year ending December 31, 1896.*

[Filed February 23, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President*, COLLINS B. HUBBARD, Detroit, Mich.  
*Secretary*, EDWIN B. HUTCHINSON, Detroit, Mich.  
*Treasurer*, GEORGE DINGWALL, Detroit, Mich.  
*Vice President*, HOYT POST, Detroit, Mich.

**DIRECTORS.**

COLLINS B. HUBBARD, Detroit, Mich.  
GEORGE DINGWALL, Detroit, Mich.  
HOYT POST, Detroit, Mich.  
EDWARD A. DINGWALL, Detroit, Mich.  
EDWIN B. HUTCHINSON, Detroit, Mich.

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: September 25, 1893.  
Number of stockholders at date of last election: 7.  
Number of stockholders in Michigan at same date: 7.  
Amount of full paid stock held in Michigan at same date: 120 shares.  
Date of annual meeting of stockholders December 17.  
Fiscal year of company ends December 17.  
General offices of the company are located at Detroit, Mich.

**REMARKS.**

Lease executed June 20, 1894, by the Midland & Hubbard Railroad Company to the Midland & Northern Railway Company until November 1, 1903, at a nominal rental of one (1) dollar per year, the lessees to operate the road during the term of the lease, and furnish transportation for freight and passengers.

**ANALYSIS OF CAPITAL STOCK.**

Amount authorized by charter or articles of association.....		\$30,000 00
Par value of shares .....	\$100 00	
Average price received per share.....	100 00	
Amount paid in on common.....	\$12,000 00	
Total amount paid in, as per books of the company.....		12 000 00
Paid in per mile of road owned by company.....		<u>1,200 00</u>

## ANALYSIS OF DEBT ACCOUNTS.

## UNFUNDED DEBT.

For miscellaneous.....	\$3,586 25
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## RECAPITULATION.

Total debt liabilities.....	\$3,586 25
Amount of debt liabilities per mile of road, 10 miles .....	358 62
Total amount of stock and debt .....	15,586 25
Stock and debt per mile of road.....	1,558 62

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction of road bed and right of way .....	\$15,586 25
Average cost of construction per mile of road (not including sidings), 10 miles.....	1,558 62

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini: January 1, 1894.

## MAIN LINE.

	Miles.
Length completed in Michigan.....	10
Total length road belonging to this company.....	10

Gauge of track, 4 feet 8½ inches.

STATE OF MICHIGAN, }  
COUNTY OF WAYNE, } ss.

Hoyt Post, vice president, and Edwin B. Hutchinson, secretary, of the Midland & Hubbard Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

Signed

[L. S. OF R. R.]

HOYT POST, *Vice President.*  
EDWIN B. HUTCHINSON, *Secretary.*

Subscribed and sworn to before me this 18th day of February, A. D. 1897.

FRED B. PORTER,  
*Notary Public, Wayne Co. Mich.*

**ANNUAL REPORT**  
**OF THE**  
**MIDLAND & NORTHERN RAILWAY COMPANY.**

*For the year ending December 31, 1896.*

[Filed May 12, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President*, W. B. REMINGTON, Midland, Mich.  
*Vice President*, CHAS. BROWN, Midland, Mich.  
*Secretary*, JNO. W. KELTY, Midland, Mich.  
*Treasurer*, J. W. KELTY, Midland, Mich.  
*General Manager*, CHAS. BROWN, Midland, Mich.

**DIRECTORS.**

W. B. REMINGTON, Grand Rapids, Mich.  
M. P. ANDERSON, Midland.  
JNO. W. KELTY, Midland.  
ALBERT REED, Midland.  
CHAS. BROWN, Midland.  
WM. D. GORDON, Midland.  
E. E. REMINGTON, Grand Rapids.

Terms expire with the year.

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: May 12, 1894.  
Number of stockholders at date of last election. Seven.  
Number of stockholders in Michigan at same date: Seven.  
Amount of full paid stock held in Michigan at same date: \$2,500.  
Date of annual meeting of stockholders: Tuesday following second Monday in January.  
Fiscal year of company ends December 31.  
General offices of the company are located at Midland, Mich.

**GENERAL EXHIBIT.**

Total earnings from operation.....	\$886 99
Total expenses, including taxes .....	1,820 48
Net deficit.....	\$933 49
Balance for the year.....	933 49
Balance (profit and loss) last year.....	1,438 31
Balance forwarded to next year .....	\$2,371 80

**ANALYSIS OF CAPITAL STOCK.**

Amount authorized by charter or articles of association.....	\$25,000 00
Par value of shares .....	\$100 00
Number of shares issued.....	25
Amount paid in on common.....	\$2,500 00
Total amount paid in, as per books of the company.....	\$2,500 00
Paid in per mile of road owned by company.....	250 00

## ANALYSIS OF DEBT ACCOUNTS.

## UNFUNDED DEBT.

Total unfunded debt .....	\$8,547 29
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## RECAPITULATION.

Total unfunded debt .....	\$8,547 29
Amount of debt liabilities per mile of road, 10 miles .....	854 73
Total amount of stock and debt .....	11,047 29
Stock and debt per mile of road .....	1,104 73

## GENERAL BALANCE SHEET.—Dr.

Construction account .....	\$5,915 29
Equipment account .....	2,780 26
Deficit .....	2,371 80
Total .....	\$11,047 29

## GENERAL BALANCE SHEET.—Cr.

Capital stock .....	\$2,500 00
Other liabilities (list as follows):	
Account of Cleveland W. W. Co. ....	8,547 29
Total .....	\$11,047 29

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction and equipment .....	\$8,675 49
Average cost per mile of road (not including sidings), 10 miles .....	867 55
Proportion of cost for Michigan. All.	

## ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

## FREIGHT EARNINGS.

Local traffic .....	\$886 99
Total freight department earnings .....	\$886 99
Total transportation earnings, entire line .....	886 99
Per mile of road .....	88 70
Transportation earnings per mile of road .....	\$88 70
Total earnings from operation of road .....	\$886 99
Total earnings per mile of road .....	88 70
Proportion of taxable earnings for Michigan: All.	
Total income from all sources .....	\$886 99

## ANALYSIS OF EXPENSES.

Total .....	\$1,820 48
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## RECAPITULATION OF EXPENSES.

Conducting transportation .....	\$1,820 48
Total operating expenses and taxes .....	\$1,820 48
Percentage of expenses to earnings, 2.03.	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini.  
From Midland to Hubbard, January, 1895.

MAIN LINE.		Miles.	Miles.
In Michigan, from Midland to Hubbard .....		10.	
Total length completed .....			10.

Gauge of track, 4 feet 8½ inches.

*Crossings.—Railroad and highway.*

What railroads cross your road at grade in this State, and at what locality?  
F. & P. M. R. R. at Midland.  
M. C. R. R. at Midland.

At what crossings are interlocking and derailing switches in operation?  
F. & P. M. at Midland.  
M. C. at Midland.

What pattern or patterns have you adopted?  
Johnson.

Number of crossings of highways at grade in this State..... 8

Are your frogs and guard rails blocked as required by Act No. 174, Session Laws of 1883?  
Yes.

How are they treated?  
Wooden blocks.

*Stations.*

Number of stations on whole lines..... 2  
Same in Michigan..... 2

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials..... 3  
Same in Michigan..... 3

Classify your employees as per following list:

	Number.
Conductors.....	1
Engineers.....	1
Firemen.....	1

*Fencing in Michigan.*

How many miles of fencing have you..... 8  
Give the number of miles required to complete fence both sides of your track in Michigan, and the counties in which needed..... 12  
Total miles required..... 20

*Road bed and track.*

Number of track sections in Michigan..... 1  
Average lengths of sections (miles)..... 10

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of 10 to 20 tons weight, exclusive of tender.....	1	\$900 00
Number of express and baggage cars.....	1	75 00
Number of platform cars.....	2	75 00
Logging.....	12	1,000 00

STATE OF MICHIGAN, } ss.  
COUNTY OF MIDLAND.

Charles Brown, vice president, and Jno. W. Kelty, secretary and treasurer of the Midland and Northern Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF B. E.]

Signed,

CHARLES BROWN.  
JNO. W. KELTY.

Subscribed and sworn to before me this 11th day of May, A. D. 1897.

[L. S.]

F. E. BARBOUR,  
Notary Public in and for Midland Co., Mich.



ANNUAL REPORT  
OF THE  
MINERAL RANGE RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed April 5, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President, WM. F. FITCH, Marquette, Mich.*  
*Vice President, W. E. PARNALL, Laurium, Mich.*  
*Secretary, A. E. MILLER, Marquette, Mich.*  
*Auditor, A. E. DELF, Marquette, Mich.*  
*Treasurer, E. W. ALLEN, Marquette, Mich.*  
*Assistant Treasurer and Assistant Secretary, GEO. H. CHURCH, New York, N. Y.*  
*General Manager, WM. F. FITCH, Marquette, Mich.*  
*Superintendent, J. C. SHIELDS, Hancock, Mich.*  
*General Passenger Agent, GEO. W. HIBBARD, Marquette, Mich.*  
*General Freight Agent, WM. ORR, Duluth, Minn.*  
*Attorney, A. B. ELDRIDGE, Marquette, Mich.*

DIRECTORS.

WILLIAM F. FITCH, Marquette, Mich.  
E. W. ALLEN, Marquette, Mich.  
A. E. DELF, Marquette, Mich.  
J. G. REYNOLDS, Marquette, Mich.  
E. C. WILLIAMS, Marquette, Mich.  
C. H. SHAFFER, Marquette, Mich.  
JAS. E. JOPLING, Ishpeming, Mich.  
W. E. PARNALL, Laurium, Mich.  
THOS. NELSON, Boston, Mass.  
GEO. H. CHURCH, New York, N. Y.  
J. HUGH PETERS, New York, N. Y.  
Terms expire July 14, 1897.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: November 3, 1871.  
Number of stockholders at date of last election: 20.  
Number of stockholders in Michigan at same date: 10.  
Amount of full paid stock held in Michigan at same date: 100 shares.  
Date of annual meeting of stockholders: Second Tuesday in July.  
Fiscal year of company ends: December 31.  
General offices of the company are located at Marquette, Mich.

## GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$108,235 56
Total expenses, including taxes.....	\$59,822 96	
Net income.....		\$48,412 60
Interest on funded debt.....	17,025 00	
Interest on unfunded debt.....	8,228 38	
Balance applicable to dividends.....		23,159 22
Dividends declared (7%).....	\$27,538 00	
Balance for the year.....	4,878 78	
Balance (profit and loss) last year.....		159,613 88
Items not included in above.....		12,500 00
Balance forward to next year.....		\$167,735 10

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$400,000 00
Par value of shares.....	\$100 00	
Number of shares issued.....	3,984	
Amount paid in on common.....	\$393,400 00	
Total amount paid in as per books of the company.....		393,400 00
Paid in per mile of road owned by company, 17.40 miles.....		22,609 20

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
M. E. R. E. main line first mortgage, June 1, 1873.....	8%	June 1, 1888.....	New York City...	\$6,000 00
M. E. R. E. main line general mortgage, December 14, 1886.....	4%	Jan. 1, 1937.....	New York City...	7,300 00
M. E. R. E. consolidated mortgage, Jan. 1, 1891.....	5%	Jan. 1, 1931.....	New York City...	*600,000 00
Total funded debt.....				\$613,300 00

\* Of the \$600,000.00 five per cent bonds, \$239,500.00 are in the treasury of the company.

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For miscellaneous.....	To be paid in cash.....	\$148,500 00
For current balances.....	" " " ".....	145,197 85
Total unfunded debt.....		\$293,697 85

## RECAPITULATION.

Total funded debt.....	\$613,300 00
Total unfunded debt.....	293,697 85
Total debt liabilities.....	\$906,997 85
Amount of debt liabilities per mile of road (17.40 miles).....	52,126 31
Total amount of stock and debt.....	1,800,397 85
Stock and debt per mile of road (17.40 miles).....	74,735 51

# MINERAL RANGE RAILROAD COMPANY.

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## GENERAL BALANCE SHEET.—Dr.

Construction account.....		\$845,988 91
Equipment account.....		133,328 00
Other investments:		
Hancock & Calumet R. R.....	\$250,000 00	
Peninsular Copper mine.....	2,044 00	
Houghton County Agricultural and Driving Park Association.....	640 00	
Mineral Range R. R. 5% bonds.....	259,500 00	
Dayton & Southeastern R. R. bonds.....	10,400 00	
		522,584 00
Cash items:		
Cash.....	\$4,812 08	
Bills receivable.....	125,500 00	
Due from agents.....	5,485 08	
		135,797 14
Other assets:		
Materials and supplies.....	\$29,138 14	
Debit balances from companies and individuals.....	1,346 78	
		30,484 90
Total.....		<u>\$1,468,132 95</u>

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....		\$393,400 00
Funded debt.....		613,300 00
Unfunded debt:		
Interest unpaid.....	\$1,234 75	
Dividends unpaid.....	13,769 00	
Notes payable.....	148,500 00	
Vouchers and accounts.....	130,144 10	
		293,697 85
Profit and loss or income accounts.....		167,735 10
Total.....		<u>\$1,468,132 95</u>

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction and equipment.....	\$779,268 91
Average cost per mile of road (not including sidings), 17.40 miles.....	44,785 45
Proportion of cost for Michigan.....	<u>779,268 91</u>

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

Main line:		
Other items.....	\$316 67	
New fences.....	55 55	
Total.....	\$372 22	
Total charges to property account as above.....		\$372 22
Net addition to property account.....		<u>372 22</u>

## ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

### PASSENGER EARNINGS.

Main line and branches:		
Local fares.....	\$31,132 19	
Total passenger fares.....	\$31,132 19	
Express and baggage.....	1,658 02	
Mails.....	1,330 59	
Total passenger department earnings.....		\$34,120 80
Per train mile.....	\$0 85.37	
Per mile of road.....	<u>1,960 97</u>	

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic.....	\$73,455 02	
Total traffic.....	\$73,455 02	
Other sources, freight department.....	651 92	
Total freight department earnings.....		\$74,006 94
Per train mile.....	\$1 26.34	
Per mile of road.....	4,253 27	
Total transportation earnings, entire line.....		\$108,127 74
Transportation earnings per mile of road.....	6,214 24	
Transportation earnings per train mile.....	1 09.73	
Miscellaneous receipts from operating account, other than for transportation:		
From rents not otherwise provided for.....	107 82	
Total.....		107 82
Distribution of miscellaneous earnings between main line and leased or proprietary roads:		
Company:	Total mis- cellaneous.	Proportion for Michigan.
Mineral Range R. R.....	\$107 82	\$107 82
Total earnings from operation of road.....		\$108,235 56
Total earnings per mile of road.....	\$6,220 43	
Total earnings per train mile.....	1 09.83	
Proportion of taxable earnings for Michigan.....		108,235 56
Total taxable earnings per mile of road in Michigan.....		6,220 43
Income other than from earnings.....		12,500 00
Total income from all sources.....		\$120,735 56
Proportion of income for Michigan.....		120,735 56

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway.....	\$4,956 81
Renewals of ties.....	962 91
Repairs and renewals of bridges and culverts.....	1,894 86
Repairs and renewals of fences, road crossings, signs and cattle guards.....	219 78
Repairs and renewals of buildings and fixtures.....	1,123 57
Repairs and renewals of docks and wharves.....	130 76
Repairs and renewals of telegraph.....	427 70
Stationery and printing.....	1 37
Total.....	\$9,712 76

## MAINTENANCE OF EQUIPMENT.

Superintendence.....	\$1,185 00
Repairs and renewals of locomotives.....	1,994 56
Repairs and renewals of passenger cars.....	1,036 45
Repairs and renewals of freight cars.....	2,697 73
Repairs and renewals of shop machinery and tools.....	553 81
Other expenses.....	66 36
Total.....	\$7,583 96

## CONDUCTING TRANSPORTATION.

Superintendence.....	\$1,416 49
Engine and roundhouse men.....	6,140 11
Fuel for locomotives.....	7,810 35
Water supply for locomotives.....	75 00
Oil, tallow and waste for locomotives.....	334 45
Other supplies for locomotives.....	64 29
Train service.....	3,260 29
Train supplies and expenses.....	324 65
Switchmen, flagmen and watchmen.....	1,051 33
Telegraph expenses.....	1,236 63
Station service.....	9,360 95
Station supplies.....	936 90
Loss and damage.....	116 14
Injuries to persons.....	132 31
Advertising.....	40 38
Rent of buildings and other property.....	340 00
Stationery and printing.....	442 56
Total.....	\$33,112 92

# MINERAL RANGE RAILROAD COMPANY.

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## GENERAL EXPENSES.

Salaries of general officers.....	\$2,550 00
Salaries of clerks and attendants.....	2,041 19
General office expenses and supplies.....	136 56
Insurance.....	1,037 50
Law expenses.....	491 21
Stationery and printing (general offices).....	91 64
Other expenses.....	151 95
Taxes.....	2,861 27
<b>Total.....</b>	<b>\$9,413 82</b>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	16.24	\$3,712 76
Maintenance of equipment.....	12.68	7,583 96
Conducting transportation.....	55.35	33,112 92
General expenses, including taxes.....	15.73	9,413 82
<b>Total operating expenses and taxes.....</b>	<b>100</b>	<b>\$59,822 96</b>
Operating expenses and taxes per mile of road.....		\$3,438 10
Operating expenses and taxes per train mile run, for trains, earning revenue, 98,544 miles.....	\$0 60.71	
<b>Total proportion of expenses for Michigan.....</b>		<b>59,822 96</b>
Percentage of expenses to earnings.....	55.27	
Net earnings per mile of road.....	2,732 33	
Net earnings per train mile.....	49.13	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Houghton to Red Jacket, October 11, 1873.

### MAIN LINE.

	Miles.	Miles.
In Michigan, from Houghton to Red Jacket.....	15.20	
<b>Total length completed.....</b>		<b>15.20</b>

### BRANCHES.

Franklin, from Franklin Junction to Quincy Mine.....	2.20	
Total length of branches owned by company.....		2.20
Total length of branches owned by company in Michigan.....	2.20	
Total length of road belonging to this company.....		17.40
Total length of road b-longing to this company in Michigan.....	17.40	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated.....		4.37
<b>Aggregate length of tracks in Michigan belonging to this company, computed as single track.....</b>		<b>21.77</b>

Gauge of track, 3 feet.

### Number of bridges and trestles in Michigan.

	Number.	Aggregate length feet.
Wooden bridges.....	5	1,725 1/4
Wooden trestles.....	4	162
<b>Total.....</b>	<b>9</b>	<b>1,887 1/4</b>

### Draw bridges in Michigan.

How many on your line.....	1
----------------------------	---

Where located, when built, and length of draw span:  
Houghton, Mich., built in 1886. Total length of draw span, 180 feet.

Character of structure:  
Howe Truss.

Material of which constructed:  
Wood.

Height above water, and depth of water under bridge:  
6 feet, 24 feet.

How swung, by engine or hand power:  
Engine.

Approaches straight or curved:  
Curved.

Do you require all trains to come to full stop before crossing a draw, and how are they signaled?  
Yes; by flagman.

*Crossings.—Railroad and highway.*

What railroads cross your road at grade in this State and at what locality?

Hancock & Calumet R. R. at Osceola.  
Hecla & Torch Lake R. R. at Calumet.  
Quincy & Torch Lake R. R. at Franklin.

At what crossings are interlocking and derailing switches in operation?  
Osceola and Calumet.

What pattern or patterns have you adopted?  
Pennsylvania Steel Co., Saxby & Farmer machine.

Number of crossings of highways at grade in this State.....	18
Number of crossings of highways at grade in this State at which there are gates or flagmen.....	2
Number of crossings of highway over or under railroad: over, 1; under, 1.....	2
Number of highway bridges 18 feet above track.....	1

Have safety guards been erected at overhead obstructions?  
Yes.

Are your frogs and guard rails blocked as required by act 174, Session Laws of 1883?  
Yes.

How are they treated?  
Filled in with wooden blocks

*Stations.*

Number of stations on whole lines.....	
Same in Michigan.....	

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials.....	103
Same in Michigan.....	103

Classify your employees as per following list:

	Number.
Baggagemen.....	2
Brakemen.....	5
Conductors.....	3
Engineers.....	5
Firemen.....	5
Laborers.....	12
Shopmen.....	24
Yardmen.....	2
Others.....	45

**REPAIRS AND RENEWALS.**

*Fencing in Michigan.*

How many miles of fencing have you?.....	22
------------------------------------------	----

Give the number of miles required to complete fence both sides of your track in Michigan, and the counties in which needed:

Houghton county.....	12.80
Total miles required.....	12.80

*Road bed and track.*

Number of track sections in Michigan.....	3
Average lengths of sections, miles.....	6
Average number of men in each section gang.....	4
Number of new ties put in whole line during the year.....	4,251
Number of new ties put in track in Michigan.....	4,251
Average number of new ties per mile of road.....	244

## ROLLING STOCK.

	Number.	Present esti- mated value.
Number of locomotives of more than 30 tons weight, exclusive of tender .....	3	\$21,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender .....	1	6,900 00
Number of locomotives of 10 to 20 tons weight, exclusive of tender .....	4	20,000 00
<b>Total</b> .....	<b>8</b>	<b>\$47,900 00</b>
Number of passenger cars—8-wheel, including official cars .....	8	\$24,000 00
Number of express and baggage cars .....	2	5,000 00
Number of box freight cars .....	86	25,800 00
Number of platform cars .....	69	17,250 00
Number of conductors' way cars .....	2	1,000 00
Other cars as follows:		
Gondola, 30; snow plow, 1 .....	31	8,450 00
<b>Total</b> .....	<b>196</b>	<b>\$129,400 00</b>
Number of locomotives equipped with power brakes .....		8
Number of passenger-train cars equipped with power brakes .....		9
Number of freight cars equipped with power brakes .....		0

What patterns of power brakes have you in use, and number of locomotives and cars with each?

5 locomotives, Westinghouse.

3 locomotives, American Brake Co., vacuum brake.

9 passenger cars, Westinghouse.

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1883, as amended by act No. 83, session laws of 1887?

Yes.

What pattern or patterns have you adopted for use?

Blocker.

How are your passenger cars heated?

Baker hot water heater.

## MILEAGE, TRAFFIC, ETC.

	Train mileage.	All in Michigan.
Miles run by passenger trains during the year .....		39,970
Miles run by freight trains during the year .....		58,574
<b>Total mileage of trains earning revenue</b> .....		<b>98,544</b>

*Passenger traffic.—Road all in State of Michigan.*

	Number.	Miles.	Rate.
Number of local passengers carried, earning revenue .....	125,625		
<b>Total number of passengers carried, earning revenue</b> .....	<b>125,625</b>		
Number of passengers carried one mile .....	1,217,721		
Average distance carried .....		9.693	
Average amount received from each passenger .....			\$0 24.781
Average receipts per mile for local passengers .....			02.356
Average receipts per passenger per mile for all passengers .....			02.556

*Freight traffic.—Road all in State of Michigan.*

	Tons.	Miles.	Rate.
Number of tons of local freight carried, earning revenue .....	124,025		
<b>Total tons of freight carried, earning revenue</b> .....	<b>124,025</b>		
<b>Total mileage of local freight</b> .....		<b>1,024,921</b>	
<b>Total freight mileage or tons carried one mile</b> .....		<b>1,024,921</b>	
Average ton haul for local freight .....		8.263	
Average ton haul for all freight .....		8.263	
Average amount received for each ton haul .....			\$0 59.226
Average receipts ton per mile, for local freight .....			07.168
Average receipts ton per mile, for all freight .....			07.168

## FREIGHT TRAFFIC MOVEMENT.—ROAD ALL IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	4,599	—	4,599	3.71
Flour.....	2,054	—	2,054	1.66
Other mill products.....	3,330	—	3,330	2.69
Hay.....	2,180	—	2,180	1.76
Fruit and vegetables.....	4,521	—	4,521	3.65
<b>Products of animals:</b>				
Live stock.....	291	—	291	0.23
Dressed meats.....	2,281	—	2,281	1.84
Other packing house products.....	105	—	105	0.08
Poultry, game and fish.....	30	—	30	0.02
<b>Products of mines:</b>				
Anthracite coal.....	13	—	13	0.01
Bituminous coal.....	51,610	—	51,610	41.61
Coke.....	164	—	164	0.13
Stone, sand and other like articles.....	2,300	—	2,300	1.86
<b>Products of forest:</b>				
Lumber.....	7,067	—	7,067	5.70
Logs.....	145	—	145	0.12
<b>Manufactures:</b>				
Petroleum and other oils.....	737	—	737	0.59
Sugar.....	133	—	133	0.11
Iron, pig and bloom.....	2,022	—	2,022	1.63
Iron and steel rails.....	630	—	630	0.50
Other castings and machinery.....	2,173	—	2,173	1.76
Bar and sheet metal.....	533	—	533	0.47
Cement, brick and lime.....	1,333	—	1,333	1.08
Wagons, carriages, tools, etc.....	32	—	32	0.03
Wines, liquors and beers.....	1,949	—	1,949	1.60
Household goods and furniture.....	79	—	79	0.06
<b>Merchandise.....</b>	<b>20,113</b>	<b>—</b>	<b>20,113</b>	<b>16.22</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	13,491	—	13,491	10.83
<b>Total tonnage.....</b>	<b>124,025</b>	<b>—</b>	<b>124,025</b>	<b>100</b>

## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

Western Express Co. Mineral Range R. R. receives \$100.00 per month. They do a general business. We take their freight at our depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

15 miles; belongs to Mineral Range R. R. Co.



## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

## INJURED.

January 16, H. Roberts, baggage-man, Hancock. Leg cut slightly while handling glass.  
 January 27, John Host, brakeman, Hancock. Riding on side of car; struck by scale house.  
 May 7, Amos DeMarse, transferman, Houghton. Ran nail into foot in jumping from car.  
 May 12, B. Bartl, transferman, Houghton. Hand crushed while handling freight.  
 June 6, Dan O'Neal, trespasser, Quincy. Fell under switch engine; left leg crushed, two toes cut off, and foot crushed badly.  
 June 17, John Lang, passenger, Red Jacket. Jumped of moving train to catch his hat; face badly bruised.  
 June 21, Geo. Allen, trespasser, Hancock. Trying to get on moving train; fell off bridge and broke his leg.  
 September 24, P. McCarthy, brakeman, Franklin. Jumping from Gondola car; ran nail into right foot.  
 December 10, P. McNamara, transferman, Houghton. Left leg broken while transferring copper; accidental.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Getting on and off trains.....				1		
Miscellaneous.....					6	
Trespassers on trains.....						1
Trespassers on tracks.....						1
Total.....				1	6	2

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons injured during the year .....	9
Number of casualties purely accidental .....	5
Number resulting from lack of caution, carelessness, or misconduct.....	4
Trespassers and tramps killed or injured.....	2

## CLASSIFICATION OF EMPLOYÉS.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggage-men.....		1	1
Brakemen.....		2	2
Not classified above.....		3	3
Total.....		6	6

STATE OF MICHIGAN, }  
 COUNTY OF MARQUETTE, } ss.

A. E. Delf, auditor, of the Mineral Range Railroad Company, being duly sworn deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declares them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of his knowledge and belief.

[L. S. OF R. R.]

Signed,

A. E. DELF, Auditor.

Subscribed and sworn to before me this 1st day of April, A. D. 1897.

[L. S.]

CHARLES A. PAYNE,  
 Notary Public, Marquette Co., Mich.

**ANNUAL REPORT**  
**OF THE**  
**MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE RAILWAY**  
**COMPANY,**

*For the year ending December 31, 1896.*

[Filed April 15, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President*, THOMAS LOWRY, Minneapolis.  
*Vice President*, JOHN MARTIN, Minneapolis.  
*Secretary*, C. F. CLEMENT, Minneapolis.  
*Auditor*, C. W. GARDNER, Minneapolis.  
*Treasurer*, C. F. CLEMENT, Minneapolis.  
*General Manager*, F. D. UNDERWOOD, Minneapolis.  
*Superintendent*, E. PENNINGTON, Minneapolis.  
*Division Superintendents*:  
     D. WILLARD, Minneapolis.  
     F. C. BATCHELDER, Minneapolis.  
*Chief Engineer*, W. W. RICH, Minneapolis.  
*Superintendent of Telegraph*, H. A. TUTTLE, Minneapolis.  
*General Passenger Agent*, W. R. CALLAWAY, Minneapolis.  
*General Freight Agent*, W. L. MARTIN, Minneapolis.

**DIRECTORS.**

THOMAS LOWRY, Minneapolis, Minn.  
W. D. WASHBURN, Minneapolis, Minn.  
W. B. DEAN, St. Paul, Minn.  
JNO. S. PILLSBURY, Minneapolis, Minn.  
F. H. FRAVEY, Minneapolis, Minn.  
SIR W. C. VAN HORN, Montreal, Can.  
T. G. SHAUGHNESSY, Montreal, Can.  
JOHN MARTIN, Minneapolis, Minn.  
C. H. PETTIT, Minneapolis, Minn.  
W. H. BRADLEY, Tomahawk, Wis.

Terms expire 1st Tuesday in June, 1897.

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: June 11, 1888.  
Number of stockholders at date of last election: 87.  
Date of annual meeting of stockholders: First Tuesday in June.  
Fiscal year of company ends June 30.  
General offices of the company are located at Minneapolis.

## GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$3,683,043 80
Total expenses, included taxes.....	\$2,291,191 83	
Net income.....		\$1,396,861 97
Interest on funded debt.....	\$147,016 84	
Interest on unfunded debt.....	49,258 46	
Rentals of buildings, tracks, etc. ....	101,021 09	
		1,297,296 39
Balance for the year .....		\$99,555 58
Balance (profit and loss) last year.....	\$823,555 87	
Loss on sale of boats "1896" .....	100,291 70	
Balance forward to next year.....		\$824,292 99

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association .....		\$21,000,000 00
Par value of shares.....	\$100 00	
Number of shares issued .....	21,000	
Amount paid in on common .....	\$14,000,000 00	
Amount paid in on preferred .....	7,000,000 00	
Total amount paid in, as per books of the company.....		21,000,000 00
Paid in per mile of road owned by company, 1,170.21 miles.....		17,945 21

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mort. bonds, M & P. R'y, Jan. 1, '86.....	4%	January 1, 1896	New York.....	\$3,204,000 00
First mort. bonds, M. S. S. M. & A. R'y, Jan. 1, '86.....	4%	January 1, 1926	New York.....	8,280,000 00
First mort. bonds, M., St. P. & S. S. M. Ry., consols. July 1, '88.....	4%	July 1, 1898	New York.....	16,861,000 00
Income certificates, May 27, '90.....		July 1, 1900	New York.....	771,000 00
R. R. Equipment Co., Nov. 25, '87*.....				13,469 32
Bristol Wagon & Carriage Co., L'd, Nov. 1, '92†.....				19,008 00
Bristol Wagon & Carriage Co., L'd, Nov. 1, '92‡.....				20,908 80
Victoria Rolling stock Co., Dec. 1, '83, Toronto, Canada  .....			Toronto, Canada.	584,591 78
Total funded debt.....				\$29,753,978 10

\* Principal and interest in monthly installments of \$1,122.46 each, until November, 1897.

† Principal and interest in monthly installments of \$1,900.80, until November, 1897.

‡ Principal and interest in monthly installments of \$1,900.80, until November, 1897.

|| Principal and interest in half yearly payments of \$41,816.80 each.

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For real estate .....	To be paid from real estate .....	\$83,000 00
For miscellaneous .....	To be paid from earnings and assets of the road .....	2,738,380 04
For current balances.....		
Total unfunded debt.....		\$2,821,380 04

## RECAPITULATION.

Total funded debt.....	\$29,753,978 10
Total unfunded debt.....	2,821,380 04
Total debt liabilities.....	\$32,575,358 14
Amount of debt liabilities per mile of road, 1,170.21 miles.....	27,837 19
Total amount of stock and debt.....	53,575,358 14
Stock and debt per mile of road, 1,170.21 miles.....	45,772 6

## GENERAL BALANCE SHEET.—Dr.

Construction account.....	\$40,912,049 48
Equipment account.....	4,503,958 86
Other investments:	
Aberdeen, Bismarck & Northwestern R'y.....	5,397,472 79
Real estate.....	246,244 13
	\$51,059,725 26
Cash items:	
Cash.....	\$646,696 65
Bills receivable.....	3,386 00
Due from agents.....	179,676 18
	829,758 83
Other assets:	
Materials and supplies.....	\$347,829 50
Sinking funds—Sault Ste. Marie Bridge Co.....	7,501 72
Debit balances from companies and individuals.....	196,000 84
Treasury stock.....	225,600 00
Bond, village marine.....	200 00
Bond, Chapin Mining Co.....	40,200 00
St. Paul Union Depot stock.....	43,750 00
New Jersey Bridge Con. Co. stock.....	500 00
	861,582 06
Income account.....	824,291 99
Total.....	\$53,575,358 14

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$21,000,000 00
Funded debt:	
First mort. M. & P. bonds.....	\$3,204,000 00
First mort. M S S. & A bonds.....	8,280,000 00
First mort. M., St. P. & S. S. M. consols.....	16,861,000 00
Income certificates.....	771,000 00
Car Trust notes.....	637,978 10
	29,753,978 10
Unfunded debt:	
Interest unpaid.....	\$519,100 00
Notes payable.....	108,000 00
Vouchers and accounts.....	1,857,795 11
Other liabilities:	
Pay rolls.....	151,730 20
Foreign roads balances.....	94,763 98
Taxes.....	89,990 77
	2,821,380 04
Total.....	\$53,575,358 14

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction and equipment.....	\$50,813,481 13
Average cost per mile of road (not including sidings), 1,170.21 miles.....	43,422 53
Proportion of cost for Michigan, 198.89 miles.....	8,713,952 31

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

	Extensions and new sidings.	Bridges & other con- struction.	New buildings.	New fences.	New loco- motives.	New cars.	Total.
Main line.....	\$30,290 74	\$67,455 55	\$5,311 97	\$1,239 94	\$1,842 68	\$5,670 41	\$89,846 53
Branches: A. B. & N. W. R. R.	635 92						635 92
Total charges..	\$30,926 66	\$67,455 55	\$5,311 97	\$1,239 94	\$1,842 68	\$5,670 41	\$90,482 45

Total charges to property account as above.....	\$101,464 83
Property, old and credited .....	10,982 88
Net addition to property account .....	90,482 45

## ANALYSIS OF EARNINGS.—IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

Main line and branches:		
Local fares .....	\$48,945 42	
Through fares .....	67,325 06	
Total passenger fares.....	\$116,270 48	
Express and baggage.....	7,769 50	
Mails .....	24,986 69	
Other sources.....	6,284 76	
Total passenger department earnings.....		\$155,291 43
Per train mile .....	\$0 77.63	
Per mile of road.....	779 46	

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic .....	\$223,909 06	
Through traffic .....	387,856 49	
Total traffic .....	\$611,765 57	
Other sources, freight department.....	2,166 90	
Total freight department earnings.....		613,932 47
Per train mile .....	\$1 86.16	
Per mile of road.....	3,061 52	

## ANALYSIS OF EARNINGS.—ENTIRE LINES.

## PASSENGER EARNINGS.

Main line and branches:		
Local fares .....	\$279,504 97	
Through fares .....	196,577 21	
Total passenger fares .....	\$475,082 18	
Express and baggage.....	37,377 36	
Mails .....	160,927 70	
Other sources.....	25,171 95	
Total passenger department earnings.....		\$698,589 19
Per train mile .....	\$0 68.51	
Per mile of road.....	587 46	

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic .....	\$1,769,939 54	
Through traffic .....	1,189,496 69	
Total traffic .....	\$2,959,436 23	

Other sources, freight department.....	\$6,739 98	
Total freight department earnings.....		\$2,966,212 21
Per train mile.....	\$1 84.72	
Per mile of road.....	2,495 32	
Total transportation earnings, entire line.....		\$3,664,771 40
Transportation earnings per mile of road.....	\$3,082 98	
Transportation earnings per train mile.....	1 41.04	
Miscellaneous receipts from operating account, other than for transportation, as follows:		
From telegraph (Michigan proportion \$3,943.91).....	22,127 24	
From other sources (Michigan proportion \$225.98).....	1,145 16	
Total.....		3,688,043 80
Total earnings from operation of road.....		\$3,688,043 80
Total earnings per mile of road.....	\$3,102 56	
Total earnings per train mile.....	1 41.94	
Proportion of taxable earnings for Michigan.....		773,393 79
Total taxable earnings per mile of road in Michigan.....	3,826 65	
Income other than from earnings:		
Car mileage.....	80,862 33	
Total income from all sources.....		\$3,718,906 13
Proportion of income for Michigan; earnings, \$773,393.79; car mileage, \$7,476.06.....		780,869 85

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway.....	\$226,908 61
Renewals of rails.....	3,315 85
Renewals of ties.....	45,001 78
Repairs and renewals of bridges and culverts.....	53,224 71
Repairs and renewals of fences, road crossings, signs and cattle guards.....	4,071 24
Repairs and renewals of buildings and fixtures.....	34,380 06
Repairs and renewals of docks and wharves.....	5,648 73
Repairs and renewals of telegraph.....	6,585 30
Stationery and printing.....	441 18
Total.....	\$384,586 96

## MAINTENANCE OF EQUIPMENT.

Superintendence.....	\$25,134 05
Repairs and renewals of locomotives.....	177,004 61
Repairs and renewals of passenger cars.....	44,808 73
Repairs and renewals of freight cars.....	148,568 72
Repairs and renewals of work cars.....	9,578 79
Repairs and renewals of shop machinery and tools.....	12,868 85
Stationery and printing.....	1,906 24
Total.....	\$419,872 09

## CONDUCTING TRANSPORTATION.

Superintendence.....	\$50,140 37
Engine and roundhouse men.....	204,815 33
Fuel for locomotives.....	224,811 06
Water supply for locomotives.....	15,604 02
Oil, tal ow and waste for locomotives.....	7,780 15
Other supplies for locomotives.....	3,735 94
Train service.....	154,463 38
Train supplies and expenses.....	34,317 76
Switchmen, flagmen and watchmen.....	31,834 91
Telegraph expenses.....	60,953 60
Station service.....	145,583 92
Station supplies.....	9,821 08
Switching charges—balance.....	4,301 83
Car mileage—balance.....	30,862 33
Hire of equipment.....	5,249 21
Loss and damage.....	20,481 73
Injuries to persons.....	38,799 59
Clearing wrecks.....	1,732 89
Operating marine equipment, including docks.....	35,625 67
Advertising.....	14,140 24
Outside agencies.....	78,950 47
Stock yards and elevators.....	4,983 90
Rents for tracks, yards and terminals.....	65,686 33
Rent of buildings and other property.....	748 63
Stationery and printing.....	15,730 83
Other expenses.....	18,823 12
Total.....	\$1,265,008 01

# MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE RAILWAY CO. 429

## GENERAL EXPENSES.

Salaries of general officers.....	\$23,587 22
Salaries of clerks and attendants.....	34,508 08
General office expenses and supplies.....	11,328 84
Insurance.....	15,973 84
Law expenses.....	17,203 98
Stationery and printing (general offices).....	4,073 19
Other expenses.....	4,911 85
Taxes.....	110,641 27
<b>Total.....</b>	<b>\$222,226 77</b>

## RECAPITULATION OF EXPENSES.

Maintenance of way and structures.....	\$334,586 96
Maintenance of equipment.....	419,372 00
Conducting transportation.....	1,263,006 01
General expenses, including taxes.....	222,226 77
<b>Total operating expenses and taxes.....</b>	<b>\$3,291,191 88</b>
Operating expenses and taxes per mile of road.....	1,977.99
Operating expenses and taxes per train mile run, for trains, earning revenue, 2,596,291 miles.....	88.18
Proportion of operating expenses and taxes for Michigan, main line.....	556,218 41
<b>Total proportion of expenses for Michigan.....</b>	<b>\$556,218 41</b>
Percentage of expenses to earnings.....	71.91
Net earnings per mile of road.....	\$1,085 05
Net earnings per train mile.....	40.99

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Minneapolis, Minn., to Sault Ste. Marie, Mich., January 1, 1886.  
 From Minneapolis, Minn., to Lidgerwood, N. D., December 20, 1886.  
 From Lidgerwood, N. D., to Boynton, N. D., October 29, 1887.  
 From Boynton, N. D., to Merricourt, N. D., November 5, 1891.  
 From Cardigan Junction, Minn., to St. Paul, Minn., February 22, 1886.  
 From Dresser Junction, Wis., to St. Croix Falls, Wis., September 12, 1887.  
 From Hankinson, N. D., to Valley City, N. D., Nov. 11, 1891.  
 From Valley City, N. D., to Cathay, N. D., December 1, 1892.  
 From Merricourt, N. D., to Kulm, N. D., November 13, 1892.  
 From Cathay, N. D., to Portal, N. D., September 25, 1893.

### MAIN LINE.

	Miles.	Miles.
In Michigan, from Sault Ste. Marie to Menominee River.....	192.01	
In Wisconsin, from Menominee River to St. Croix River.....	261.80	
In Minnesota, from St. Croix River to North Dakota line.....	273.59	
In North Dakota, from Minnesota line to Canadian boundary.....	360.82	
<b>Total length completed.....</b>		<b>1,088 22</b>

### BRANCHES.

From Gladstone, Mich., to end of track.....	1.10	
From Gladstone, Mich., to end of track.....	1.13	
From Setif, Mich., to end of track.....	1.51	
From Cherry, Mich., to end of track.....	.73	
From Masonville, Mich., to end of track.....	.39	
From East Lake, Mich., to end of track.....	.61	
From Marblehead, Mich., to end of track.....	1.41	
From Dresser Junction, Wis., to St. Croix Falls.....	4.05	
From Brantwood, Wis., to end of track.....	4.57	
From Glen Flora, Wis., to end of track.....	.40	
From Prentice, Wis., to end of track.....	.53	
From Rhinelander, Wis., to end of track.....	.62	
From Armstrong Creek, Wis., to end of track.....	3.03	
From Cardigan Junction, Minn., to St. Paul.....	5.34	
From Camden Place, Minn., to Northtown Junction.....	1.01	
From Hankinson, N. D., to Kulm, N. D.....	104.54	
<b>Total length of branches owned by company .....</b>		<b>130.90</b>
<b>Total length of branches owned by company in Michigan .....</b>	<b>6.83</b>	
<b>Total length of road belonging to this company .....</b>		<b>1,170 21</b>
<b>Total length of road belonging to this company in Michigan.....</b>	<b>198.89</b>	
<b>Aggregate length in Michigan of sidings, spurs and other tracks not above enumerated .....</b>	<b>35 50</b>	
<b>Aggregate length of tracks in Michigan belonging to this company, computed as single track .....</b>		<b>234.39</b>
<b>Gauge of track, 4 feet 8½ inches.</b>		

## MICHIGAN RAILROAD RETURNS, 1896.

*Proprietary or leased roads operated by this company.*

Name, description and length of each:	Total miles. In Michigan.	
Minneapolis and St. Paul terminals.....	7.16	
Sault Ste. Marie terminals.....	.34	.34
St. Paul to Minneapolis.....	11.00	
Total.....	18.50	.34
Total miles operated by the company.....	1,188.71	199.23

*Number of bridges and trestles in Michigan.*

	Number.	Aggregate length, feet.
Wooden bridges.....	13	2,449
Wooden trestles, and approaches to bridges.....	89	14,010
Total.....	102	16,459

*Crossings.—Railroad and highway.*

What railroads cross your road at grade in this State, and at what locality?

D., S. S. & A. R. R. at Trout Lake.  
 C. & N. W. R. R. at Hermansville.  
 C. & N. W. R. R. at Felch Junction.  
 Logging R. R. at Delta Junction.  
 Logging R. R. at Dunleith.  
 Logging R. R. at Naubinway.  
 Logging R. R. at South Manistique.  
 Logging R. R. at Manistique.

What railroads cross your road either over or under your grade in this State, and where?

Over—  
 C. & N. W. R. R. at Flat Rock.

At what crossings are interlocking and derailing switches in operation?  
 Felch Junction with C. & N. W. R'y.

What pattern or patterns have you adopted?  
 Union Switch & Signal Co.

Number of crossings of highways at grade in this State.....	51
Number of crossings of highways over or under railroad—under.....	2

Have safety guards been erected at overhead obstructions?  
 Yes.

Are your frogs and guard rails blocked as required by act 174, session laws 1893?  
 Yes.

How are they treated?  
 Wood blocks.

*Stations.*

Number of stations on whole lines.....	115
Same in Michigan.....	18

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials.....	2,082
Same in Michigan.....	428

Classify your employees as per following list:

Baggagemen.....	}	33
Brakemen.....		
Conductors.....		18
Engineers.....		23
Firemen. Firemen are employed by engineers.		
Laborers.....		100
Shopmen.....		32
Yardmen.....		19
Others.....		208



## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? .....	223.
Give the number of miles required to complete fence both sides of your track in Michigan, and the counties in which needed:	
	Miles.
Menominee .....	23
Delta .....	12
Schoolcraft .....	16.2
Mackinac .....	23.6
Chippewa .....	81.2
Total miles required .....	161

*Road bed and track.*

Number of track sections in Michigan .....	27.
Average length of sections, miles .....	7.38
Average number of men in each section gang .....	4.
Number of new ties put in whole line during the year .....	236,445.
Number of new ties put in track in Michigan .....	69,296.
Average number of new ties per mile of road .....	199.
New rails put in track:	
Steel tons 359, 5-112 .....	3.19
Total miles of track laid with new rails .....	3.19

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender .....	103	
Number of locomotives of 10 to 20 tons weight, exclusive of tender .....	1	
Total .....	104	\$816,094 06
Number of passenger cars—12-wheel, including official cars .....	10	85,498 16
Number of passenger cars—8-wheel, including official cars .....	35	155,673 83
Number of express and baggage cars .....	23	45,183 71
Number of box freight cars .....	4,430	1,579,910 80
Number of stock cars .....	101	43,546 10
Number of platform cars .....	705	141,540 10
Number of ore cars .....	150	45,251 40
Number of conductors' way cars .....	73	49,881 00
Other cars as follows: Refrigerator, 13; furniture, 10; charcoal, 50; ballast, 52; maintenance of way, 10 .....	135	92,456 16
Total .....	5,662	\$3,055,075 32
Number of locomotives equipped with power brakes .....		103
Number of passenger-train cars equipped with power brakes .....		68
Number of freight cars equipped with power brakes .....		471
What patterns of power brakes have you in use, and number of locomotives and cars with each?		
Locomotives—Westinghouse air, 94; steam, 10 .....		104
Cars—Westinghouse air, passenger equipped, 68; box freight, 419; flat, 52; ballast, 50; plow, 2 .....		591

Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885, as amended by Act No. 88, Session Laws of 1887?  
We are complying with U. S. statutes.

How are your passenger cars heated?  
Steam heat and Baker improved fire proof heaters.

## MILEAGE, TRAFFIC, ETC.

	Entire lines.	In Michigan.
Miles run by passenger trains during the year .....	959,410	179,196
Miles run by freight trains during the year .....	1,898,218	267,255
Miles run by mixed trains .....	240,663	83,379
Total mileage of trains earning revenue .....	2,598,291	529,830

## MICHIGAN RAILROAD RETURNS, 1896.

*Passenger traffic.—Entire lines.*

	Numbers.	Miles.	Rate.
Number of through passengers carried, earning revenue.....	40,333		
Number of local passengers carried earning revenue.....	234,904		
Total number of passengers carried, earning revenue .....	275,237		
Number of passengers carried one mile .....	22,143,538		
Average distance carried.....		80.45	
Average amount received from each passenger .....			\$1 73
Average receipts per mile for through passengers .....			01.69
Average receipts per mile for local passengers.....			02.41
Average receipts per passenger per mile for all passengers.....			02.05

*Passenger traffic.—In State of Michigan.*

	Numbers.	Miles.	Rate.
Number of through passengers carried, earning revenue.....	24,979		
Number of local passengers carried, earning revenue.....	50,270		
Total number of passengers carried, earning revenue.....	75,249		
Number of passengers carried one mile.....	5,146,968		
Average distance carried.....		68.38	
Average amount received from each passenger.....			\$1 54
Average receipts per mile for through passengers.....			01.85
Average receipts per mile for local passengers.....			03.21
Average receipts per passenger per mile for all passengers.....			02.53

*Freight traffic.—Entire lines.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue .....	946,409		
Number of tons of local freight carried, earning revenue.....	1,169,248		
Total tons of freight carried, earning revenue.....	2,115,657		
Total mileage of through freight.....		221,415,344	
Total mileage of local freight.....		239,607,237	
Total freight mileage or tons carried one mile.....		461,022,581	
Average ton haul for through freight.....		234	
Average ton haul for local freight.....		205	
Average ton haul for all freight.....		218	
Average amount received for each ton haul .....			\$1 39
Average receipts ton per mile, for through freight .....			30.53
Average ton receipts per mile, for local freight.....			00.74
Average receipts ton per mile, for all freight .....			00.64

*Freight traffic.—In State of Michigan.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	659,294		
Number of tons of local freight carried, earning revenue.....	624,752		
Total tons of freight carried, earning revenue .....	1,284,046		
Total mileage of through freight .....		59,650,702	
Total mileage of local freight.....		29,866,889	
Total freight mileage or tons carried one mile .....		88,917,591	
Average ton haul for through freight .....		89	
Average ton haul for local freight.....		43	
Average ton haul for all freight .....		69	
Average amount received for each ton haul .....			\$0 47.00
Average receipts ton per mile, for through freight.....			00.85
Average receipts ton per mile, for local freight .....			00.75
Average receipts ton per mile, for all freight .....			00.69

## FREIGHT TRAFFIC MOVEMENT.—ENTIRE LINES.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	474,085	1,727	475,792	22.48
Flour.....	284,218	192	284,410	13.44
Other mill products.....	23,008	377	23,383	1.10
Hay.....	20,465	725	21,190	1.00
Fruit, vegetables and potatoes.....	4,879	7,541	12,420	.68
Other products.....	616	289	855	.04
<b>Products of animals:</b>				
Live stock.....	11,476	114	11,590	.50
Dressed meats.....	6,789	97	6,886	.32
Poultry, game and fish.....	887	1,455	2,342	.11
Wool.....	3,636	43	3,679	.17
Hides and leather.....	1,518	399	1,917	.09
<b>Products of mines:</b>				
Anthracite coal.....	3,687	24,210	27,897	1.32
Bituminous coal and coals.....	12,508	63,709	76,217	3.60
Charcoal.....	13,646	536	14,182	.67
Ores.....	41,449	259,915	301,364	14.24
Stone, sand and other like articles.....	2,752	549	3,301	.15
Salt.....	1,478	5,621	7,099	.38
<b>Products of forest:</b>				
Lumber.....	615,023	46,900	661,923	31.29
Logs.....				
Shingles.....				
<b>Manufactures:</b>				
Petroleum and other oils.....	3,443	3,168	6,611	.30
Sugar.....	1,296	8,077	9,373	.44
Iron, pig and bloom.....	5,319	1,961	7,300	.34
Iron and steel rails.....	509	853	1,362	.06
Other castings and machinery.....	3,862	8,279	12,141	.57
Bar and sheet metal.....	276	820	1,096	.05
Cement, brick, and lime.....	12,857	990	13,847	.65
Agricultural implements.....	2,593	1,157	3,750	.17
Wagons, carriages, tools, etc.....	369	509	878	.04
Wines, liquors and beers.....	2,733	1,920	4,653	.22
Household goods and furniture.....	1,755	690	2,445	.12
Other manufactured articles.....	9,229	5,648	14,887	.70
<b>Merchandise.....</b>	<b>43,704</b>	<b>27,675</b>	<b>71,379</b>	<b>3.37</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	14,143	15,345	29,488	1.39
<b>Total tonnage.....</b>	<b>1,624,196</b>	<b>491,461</b>	<b>2,115,657</b>	<b>100</b>

## FREIGHT TRAFFIC MOVEMENT.—IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	193,798	529	194,327	15.13
Flour.....	247,928	186	248,082	19.32
Other mill products.....	18,968	135	19,103	1.48
Hay.....	14,765	358	15,123	1.17
Fruit and vegetables.....	1,842	7,402	9,244	.72
Potatoes.....				
Other products.....	223	142	365	.08
<b>Products of animals:</b>				
Live stock.....	394	70	464	.08
Dressed meats.....	6,193	97	6,290	.49
Poultry, game and fish.....	814	1,249	2,063	.16
Wool.....	3,515		3,515	.27
Hides and leather.....	1,199	67	1,266	.10
<b>Products of mines:</b>				
Anthracite coal.....	4,468	24,139	28,607	2.22
Bituminous coal and coke.....	2,499	63,389	65,888	5.12
Charcoal.....	13,566	536	14,102	1.09
Ores.....	42,376	251,104	293,480	22.85
Stone, sand and other like articles.....	2,285	549	2,784	.21
Salt.....	1,046	5,806	6,652	.54
<b>Products of forest:</b>				
Lumber.....	244,601	19,196	263,797	20.54
Logs.....				
Shingles.....				
<b>Manufactures:</b>				
Petroleum and other oils.....	32	2,680	2,712	.21
Sugar.....	157	8,078	8,235	.65
Iron, pig and bloom.....	5,076	1,968	7,044	.55
Iron and steel rails.....	155	882	987	.07
Other castings and machinery.....	715	8,232	8,947	.69
Bar and sheet metal.....	231	819	1,050	.08
Cement, brick and lime.....	10,214	932	11,146	.86
Agricultural implements.....		1,115	1,115	.06
Wagons, carriages, tools, etc.....		484	484	.03
Wines, liquors and beers.....	1,481	1,810	3,241	.25
Household goods and furniture.....	333	660	993	.07
Other manufactured articles.....	7,893	5,482	13,375	1.04
<b>Merchandise.....</b>	<b>9,147</b>	<b>25,185</b>	<b>34,332</b>	<b>2.67</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	2,609	12,424	15,233	1.18
<b>Total tonnage.....</b>	<b>838,621</b>	<b>445,425</b>	<b>1,284,046</b>	<b>100</b>

## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

Western Express Company.

They do a general express business, this company's station agents as a usual thing acting as their agents.

Telegraph.

Number of miles of telegraph on your road, and to whom does it belong?  
Miles of line, 1,178.6; miles of wire, 2,931.2. Owned by this company.

REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1906.

KILLED.

April 16, unknown, trespasser, near Radfords Spar. Struck by engine.  
May 20, Nick Nippler, trespasser, Corrinne. Run over by train.  
May 24, Miss Sofia Dohl, trespasser, Gladstone. Run over by train.  
October 18, Ole Oleson, trespasser, near Corrinne. Drunk; run over.

INJURED.

January 5, Jno E. Robinson, brakeman, Caro. Slipped, sprained ankle.  
January 9, C W Roger, switchman, Gladstone. Slipped while coupling; right leg cut off.  
January 25, J J. Kolinski, brakeman, Gladstone. Slipped; hip bruised.  
January 25, E J Hyges, brakeman, Gladstone. Fell from cupola in cab, wrist sprained.  
February 4, Ida Simmons, too. Shutting car door, finger pinched.  
February 5, H A Orcutt, Trout Lake. Coupling, two fingers jammed.  
February 19, Jno Kehoe, North Escanaba. Fell from car, ankle sprained.  
March 18, Jno Olson, trackman, near Gladstone. Struck by tie chest bruised.  
March 27, C Lafaver, engineer Whitewater. Water glass broke scalded hand.  
April 6, Geo. F Dille, brakeman, Trout Lake. Coupling, thumb crushed.  
April 12, Jno E Robinson, brakeman, Gladstone. Hit by plank, foot sprained.  
April 27, Benjamin Everett, cooper Gladstone. Hit by latchet hand cut.  
April 28, M. J. McKelvey, boiler maker, Gladstone. Slipped, back sprained.  
May 10, Carl Popke, trackman Van Winkle. Slipped, side bruised.  
July 6, E. Vaumex, dockman, Gladstone. Sack flour fell on hand, finger bruised.  
July 6, Jno Lamolette, switchman, Gladstone. Coupling, hand pinched.  
July 3, Mrs. A. Rosebush, trespasser, near Bayce. Ran into velocipede; right leg cut off.  
July 15, Ily Snyder, dockman Gladstone. Thumb cut on box merchandise.  
July 24, M. Graham, dockman, Gladstone. Ankle bruised, hit by truck.  
August 1, F. Riler, machinist, Gladstone. Handling ore eye hurt.  
August 4, W. Bougher, dockman, Gladstone. Knee sprained, jumping into orn boat.  
August 13, Peter Carson, dockman, Gladstone. Handling ore, finger cut.  
August 18, Alfred J. Enson, dockman, Gladstone. Fell under truck, leg cut.  
August 19, Dan Nelson, dockman, Gladstone. Handling coal, leg bruised.  
August 24, Peter Peterson, dockman, Gladstone. Handling coal finger bruised.  
August 25, Mike McCarthy, switchman, Gladstone. Coupling, fingers pinched.  
August 25, Adelbert Ensign, dockman, Gladstone. Handling merchandise hand cut.  
August 26, Albert Olson, dockman, Gladstone. Handling coal, ankle sprained.  
September 3, Geo H. Elsworth, brakeman, Hogleman. Hit by pole, shoulder hurt.  
September 17, B. Delaney, sectionman, too. Run over by hand car leg bruised.  
September 21, Jas. Montgomery, boiler maker, Gladstone. Hit by piece of steel; eye hurt.  
September 24, Jno. Carson, dockman, Gladstone. Dirt in eye.  
September 25, C. Maries, dockman, Gladstone. Ran into post Neck hurt.  
October 2, O. Petersen, car checker Gladstone. Fell off hand car, scalp cut.  
October 9, L. Olson, machinist, Gladstone. Piece metal in eye; eye hurt.  
October 17, Ed. Heater, switchman, Gladstone. Check cut, hit by pin.  
October 21, G. Moreau, switchman Gladstone. Coupling hand bruised.  
October 28, Jas. Boyle, switchman, Gladstone. Coupling, thumb cut.  
October 24, C. A. Anderson, dockman Gladstone. Barrel fell on foot, toe cut off.  
October 31, Ubal Wartell, dockman Gladstone. Lifting barrel flour; back sprained.  
November 1, Jno. Giball, fireman, Hermansville. Hit by steam pipe, scalp wound.  
October 24, E. Fuhrer, express messenger, near Corrinne. Carelessness, shot in ankle.  
October 31, F. X. LaRue, dockman, Gladstone. Finger hurt on barrel of flour.  
November 1, P. J. Joyce, switchman, Gladstone. Coupling; finger pinched.  
November 10, Dell Ensign, dockman, Gladstone. Handling ore; finger cut.  
November 15, N. Swadson, dockman, Gladstone. Handling coal; head hurt.  
November 16, M. Miller, dockman, Gladstone. Hit head on beam; head cut.  
November 17, Joe Sawyer, dockman, Gladstone. Hit by sack flour; neck hurt.  
November 18, Gust Peterson, dockman, Gladstone. Handling coal; scalp cut.  
November 19, Ed. Dolan, dockman, Gladstone. Hit head on beam; scalp cut.  
November 19, Wm. Tennian, dockman, Gladstone. Fingers cut between two barrels flour.  
November 27, Jas. Allen, brakeman, Redyard. Toes bruised by barrel sugar.  
November 28, Ole Olson, dockman, Gladstone. Handling coal, head cut.  
November 29, P. Moody, dockman, Gladstone. Hit by truck; leg cut.  
November 30, E. Bauns, dockman, Gladstone. Hit by sack flour; knee sprained.  
November 30, F. Randolph, brakeman, Hunts Spur. Slipped on platform; wrist sprained.  
December 1, D. Stock, dockman, Gladstone. Slipped on gangway; knee sprained.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Coupling cars.....					8	
Falling from trains.....					1	
Miscellaneous.....					47	
Trespassers on tracks.....			4			1
Total.....			4		56	1

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year ..... 4  
 Number of persons injured during the year ..... 57

## CLASSIFICATION OF EMPLOYÉS.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....		1	
Brakemen.....		11	
Engineers.....		1	
Firemen.....		1	
Laborers.....		29	
Shopmen.....		5	
Yardmen.....		7	
Not classified above.....		1	
Total.....		56	56

STATE OF MINNESOTA, } ss.  
 COUNTY OF HENNEPIN, }

F. D. Underwood, general manager, and C. W. Gardner, auditor, of the Minneapolis, St. Paul & Sault Ste. Marie Railway Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

F. D. UNDERWOOD,  
 C. W. GARDNER.

Subscribed and sworn to before me this 13th day of April, A. D. 1897.

[L. S.]

W. R. COLLINS,  
 Notary Public, Minnesota.

**ANNUAL REPORT**  
**OF THE**  
**MUNISING RAILWAY COMPANY,**

*For the year ending December 31, 1896.*

[Filed March 16, 1897.]

**OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.**

*President*, DAN. P. EELLS, Cleveland, Ohio.  
*Vice President*, FAYETTE BROWN, Cleveland, Ohio.  
*Secretary*, D. B. CHAMBERS, Cleveland, Ohio.  
*Auditor*, H. A. ST. JOHN, Munising, Mich.  
*Treasurer*, HOWARD P. EELLS, Cleveland, Ohio.  
*General Manager*, EMMET H. SCOTT, La Porte, Ind.  
*General Superintendent*, JAS. C. DOUGHERTY, Munising, Mich.  
*Chief Engineer*, R. C. YOUNG, Munising, Mich.  
*Superintendent of Telegraph*, H. W. BARRE, Munising, Mich.  
*Cashier*, R. T. MAC LEAN, Munising, Mich.  
*General Passenger Agent*, H. A. ST. JOHN, Munising, Mich.  
*General Freight Agent*, H. A. ST. JOHN, Munising, Mich.  
*Attorney*, A. ST. J. NEWBERRY, Cleveland, Ohio.

**DIRECTORS.**

DAN. P. EELLS, Cleveland, Ohio.  
 FAYETTE BROWN, Cleveland, Ohio.  
 JOSEPH COLWELL, Cleveland, Ohio.  
 E. F. MICHAEL, La Porte, Ind.  
 ROBERT E. MORRISON, La Porte, Ind.  
 Terms expire July 20, 1897.

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: July 20, 1895.  
 Number of stockholders at date of last election: 10.  
 Number of stockholders in Michigan at same date: 2.  
 Amount of full paid stock held in Michigan at same date: \$207,000.00.  
 Date of annual meeting of stockholders: July 20.  
 General offices of the company are located at Munising, Mich.

**GENERAL EXHIBIT.**

	Debit.	Credit.
Total earnings from operation.....		\$35,902 24
Total expenses, including taxes.....	\$18,260 42	
Net income.....		\$17,641 82
Balance forward to next year.....		\$17,641 82

## MICHIGAN RAILROAD RETURNS, 1896.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$870,000 00
Par value of shares.....	\$100 00	
Number of shares issued.....	8,700	
Amount paid in on common.....	870,000 00	
Total amount paid in, as per books of the company.....		870,000 00
Paid in per mile of road projected by company, 87 miles.....		10,000 00

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
30 year gold bonds.....	6%	Oct., 1926.....	New York City.....	\$2,000 00
Total funded debt.....				\$2,000 00

\$278,000.00 in total bonds (at the rate of \$3,000.00 per mile of completed track) have been issued but these are all except \$2,000.00 within company of the company.

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For construction.....		\$340,237 75
For equipment.....		45,788 58
For current balances.....		12,855 08
Total unfunded debt.....		\$398,881 38

## RECAPITULATION.

Total funded debt.....	\$2,000 00
Total unfunded debt.....	398,881 38
Total debt liabilities.....	\$400,881 38
Amount of debt liabilities per mile of road, 25.49 miles.....	15,727 01
Total amount of stock and debt.....	1,270,881 38
Stock and debt per mile of road, 25.49 miles.....	49,858 08

## GENERAL BALANCE SHEET.—Dr.

Construction account.....	\$332,647 94
Equipment account.....	91,774 94
Other investments:	
Real estate and permanent contracts.....	780,208 50
Cash items:	
Cash.....	\$4,712 62
Bills receivable.....	61,893 25
Dues from agents.....	4,867 52
Other assets:	
Materials and supplies.....	\$3,622 97
Debit balances from companies and individuals, sundry accounts.....	8,995 45
Total.....	\$1,238,523 20



# MUNISING RAILWAY COMPANY.

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## GENERAL BALANCE SHEET.—CR.

Capital stock.....	\$370,000 00	
Funded debt.....	2,000 00	
		\$372,000 00
Unfunded debt:		
Notes payable.....	\$304,709 49	
Vouchers and accounts.....	94,171 89	
Profit and loss or income accounts.....	17,641 82	
		416,523 20
Total.....		\$1,288,523 20

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction and equipment.....	\$424,422 88
Average cost per mile of road (not including sidings) 25.49 miles.....	16,650 58
Proportion of cost for Michigan.....	16,650 58

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

### MAIN LINE.

Extensions and new sidings.....	\$323,496 97
New buildings and bridges.....	9,151 87
New locomotives.....	23,459 72
New cars.....	68,315 22
Total.....	\$424,422 88
Total charges to property account as above.....	424,422 88
Net addition to property account.....	424,422 88

## ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

### PASSENGER EARNINGS.

Main line and branches:		
Local fares.....	\$3,436 30	
Total passenger fares.....	\$3,436 30	
Express and baggage.....	328 85	
Mails.....	569 31	
Total passenger department earnings.....		\$4,334 46
Per train mile.....	\$1 12	
Per mile of road.....	170 04	

### FREIGHT EARNINGS.

Main line and branches:		
Local traffic.....	30,758 26	
Through traffic.....	691 27	
Total freight department earnings.....		31,449 53
Per train mile.....	\$2 46	
Per mile of road.....	1,233 80	
Total transportation earnings, entire line.....		\$35,783 99
Transportation earnings per mile of road.....	1,403 84	
Transportation earnings per train mile.....	2 80	
Miscellaneous receipts from operating account, other than for transportation:		
From telegraph companies.....	118 25	
Total.....		35,902 24
Total earnings from operation of road.....		\$35,902 24
Total earnings per mile of road.....	1,406 81	
Total earnings per train mile.....	2 81	
Total income from all sources.....		\$35,902 24
Proportion of income for Michigan.....		35,902 24

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway.....	\$2,282 84
Stationery and printing.....	20 94
Total.....	<u>\$2,303 28</u>

## MAINTENANCE OF EQUIPMENT.

Superintendence.....	\$34 95
Repairs and renewals of locomotives.....	233 16
Repairs and renewals of freight cars.....	737 98
Stationery and printing.....	20 93
Total.....	<u>\$1,056 97</u>

## CONDUCTING TRANSPORTATION.

Engine and roundhouse men.....	\$3,248 23
Fuel for locomotives.....	1,981 17
Oil, tallow and waste for locomotives.....	42 79
Train service.....	2,909 22
Train supplies and expenses.....	104 48
Telegraph expenses.....	568 42
Station service.....	2,158 06
Station supplies.....	159 22
Switching charges—balance.....	2,096 59
Car mileage—balance Cr.....	583 37
Loss and damage.....	58 12
Stationery and printing.....	64 11
Other expenses.....	60 12
Total.....	<u>\$12,897 13</u>

## GENERAL EXPENSES.

Salaries of general officers.....	\$1,780 00
Salaries of clerks and attendants.....	108 88
General office expenses and supplies.....	28 01
Stationery and printing (general offices).....	88 20
Total.....	<u>\$2,003 04</u>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	12.61	\$2,303 28
Maintenance of equipment.....	5.79	1,056 97
Conducting transportation.....	70.63	12,897 13
General expenses, including taxes.....	10.97	2,003 04
Total operating expenses and taxes.....	100.00	<u>\$18,260 42</u>
Operating expenses and taxes per mile of road.....		\$716 38
Operating expenses and taxes per train mile run, for trains, earning revenue, 12,790 miles.....		1 43
Total proportion of expenses for Michigan.....		<u>\$18,260 42</u>
Percentage of expenses to earnings, 50.86%.....		
Net earnings per mile of road.....		\$692 11
Net earnings per train mile.....		<u>1 38</u>

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Munising, Mich., to Mitchell, Mich., December, 1896.

## MAIN LINE.

	Miles.	Miles.
In Michigan, from Munising to Mitchell.....		25.49
Total length completed.....		<u>25.49</u>
Total length of road belonging to this company in Michigan.....	25.49	
Aggregate length in Michigan of sidings, spurs and other tracks not above enumerated.....	8.67	
Aggregate length of tracks in Michigan belonging to this company, computed as single track.....		<u>34.16</u>
Gauge of track, 4 feet 8½ inches.		

If north of parallel 44 of latitude?  
Yes.

Give date road commenced to be built:  
August 6, 1895.

Give date road completed:  
December, 1896.

Give date road commenced to be operated:  
January 15, 1896.

Where built from and to:  
From Munising, Mich., to Mitchell, Mich.

Give exact number of miles:  
25.49 miles.

*Number of bridges and trestles in Michigan.*

	Number.	Aggregate length, feet.
Wooden bridges.....	8	456
Wooden trestles.....	5	2,553
Total.....	13	3,009

*Crossings.—Railroad and highway.*

What railroads cross your road either over or under your grade in this State, and where?  
Over:  
Duluth, South Shore & Atlantic R'y, at Munising Junction, Mich.

Number of crossings of highways at grade in this State..... 4

Have safety guards been erected at overhead obstructions?  
No,—21 feet high.

Are your frogs and guard rails blocked as required by act 174, session laws of 1893?  
Yes.

How are they treated?  
Filled in with wooden blocks.

*Stations.*

Number of stations on whole lines..... 3

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials..... 46

Classify your employees as per following list:

	Number.
Brakemen.....	6
Conductors.....	3
Engineers.....	3
Firemen.....	3
Laborers.....	15
Shopmen.....	2
Others.....	14

*REPAIRS AND RENEWALS.*

*Fencing in Michigan.*

Give the number of miles required to complete fence both sides of your track in Michigan, and the counties in which needed:  
Alger county..... 50.96

*Road bed and track.*

Number of track sections in Michigan..... 3.  
Average lengths of sections, miles..... 8.47  
Average number of men in each section gang..... 5.

New bridges built during the year; Number 2.

Location.	Kind.	Material.	Month built.	Feet in length.
Au Train River.....	Howe truss.....	Wood.....	April, 1896..	56
Anna River.....	Pile bridge.....	Wood.....	June, 1896..	112

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender.....	3	\$23,500 00
Number of passenger cars—8-wheel, including official cars.....	1	1,800 00
Number of platform cars.....	145	57,000 00
Number of conductors' way cars.....	2	1,200 00
Other cars as follows:		
Russell logging cars.....	50	8,000 00
Total.....	198	\$91,500 00
Number of locomotives equipped with power brakes.....		3
Number of passenger-train cars equipped with power brakes.....		1
Number of freight cars equipped with power brakes.....		135

What patterns of power brakes have you in use, and number of locomotives and cars with each?  
 2 locomotives Westinghouse; 1 locomotive steam brake; 135 platform cars Westinghouse; 1 passenger car Westinghouse.

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?  
 Yes.

What pattern or patterns have you adopted for use?  
 Tower.

How are your passenger cars heated?  
 Stoves.

## MILEAGE, TRAFFIC, ETC.

## Train mileage.

	In Michigan.
Miles run by freight trains during the year.....	8,914
Miles run by mixed trains.....	3,876
Total mileage of trains earning revenue.....	12,790

## Passenger traffic.—Road all in State of Michigan.

	Numbers.	Miles.	Rate.
Number of local passengers carried, earning revenue.....	11,552		
Total number of passengers carried, earning revenue.....	11,552		
Number of passengers carried one mile.....	86,806		
Average distance carried.....		7.5	
Average amount received from each passenger.....			\$0 30.
Average receipts per mile for local passengers.....			03.9
Average receipts per passenger per mile for all passengers.....			03.9

## Freight traffic.—Road all in State of Michigan.

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	1,636		
Number of tons of local freight carried, earning revenue.....	77,006		
Total tons of freight carried, earning revenue.....	78,642		
Total mileage of through freight.....		9,816	
Total mileage of local freight.....		958,576	
Total freight mileage or tons carried one mile.....		968,392	
Average ton haul for through freight.....		6	
Average ton haul for local freight.....		124,481	
Average ton haul for all freight.....		123,139	
Average amount received for each ton haul.....			\$0 40
Average receipts ton per mile, for through freight.....			07
Average receipts ton per mile, for local freight.....			03
Average receipts ton per mile, for all freight.....			03

## FREIGHT TRAFFIC MOVEMENT.—ROAD ALL IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	80	337	417	.53
Flour.....		313	313	.40
Other mill products.....		116	116	.15
Hay.....	52	507	559	.71
Fruit and vegetables.....		43	43	.05
Potatoes.....		180	180	.20
<b>Products of animals:</b>				
Dressed meats.....	106		106	.14
Other packing house products.....		47	47	.06
Hides and leather.....		56	56	.07
<b>Products of mines:</b>				
Anthracite coal.....		65	65	.08
Stone, sand and other like articles.....	1,187	449	1,636	2.08
<b>Products of forest:</b>				
Lumber.....	765	4,801	5,566	6.82
Logs.....	55,169	7,031	62,200	79.09
Shingles.....	10	153	153	.24
Tan bark.....		896	896	1.14
<b>Manufactures:</b>				
Petroleum and other oils.....		12	12	.02
Castings and machinery.....	52	1,789	1,841	2.34
Cement, brick and lime.....	1,444	1,251	2,695	3.42
Wagons, carriages, tools, etc.....		12	12	.02
Wines, liquors and beers.....		434	434	.55
Household goods and furniture.....		195	195	.25
Staves and hoops.....	413		413	.53
<b>Merchandise.....</b>	<b>281</b>	<b>536</b>	<b>817</b>	<b>1.10</b>
<b>Total tonnage.....</b>	<b>59,559</b>	<b>19,063</b>	<b>78,642</b>	<b>100</b>

## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

Western Express Co

The Munising Railway receives 5 cents on all packages less than 30 lbs. weight, 15 cents per 100 lbs. on all packages over 30 lbs. in weight. Take their freight at railway depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

18 miles; belongs to the Western Union Telegraph Co.

## MICHIGAN RAILROAD RETURNS, 1896.

*Fast freight lines.*

To what fast freight lines or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

Name of company.	General office.	Amount paid.
St. Paul Refrigerator Car Co.....	South St. Paul, Minn.....	\$0 09
Hammond Refrigerator Line.....	Hammond, Ind.....	1 45
Swift Refrigerator Line.....	Chicago, Ill.....	2 88
Canadian Pacific Despatch.....	Boston, Mass.....	22
St. Louis Refrigerator Car Co.....	St. Louis, Mo.....	09
Union Refrigerator Line.....	Louisville, Ky.....	04
Merchants' Despatch Transportation Co.....	New York, N. Y.....	11

STATE OF MICHIGAN, } ss.  
COUNTY OF ALGER.

E. H. Scott, general manager, and H. A. St. John, Auditor, of the Munising Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF E. E.]

Signed,

E. H. SCOTT,  
General Manager.  
H. A. ST. JOHN,  
Auditor.

Subscribed and sworn to before me this 30th day of March, A. D. 1897.

[L. S.]

CLAUDE M. CASE,  
Notary Public, Luce County, Michigan.

# ANNUAL REPORT

## OF THE

# PONTIAC, OXFORD & NORTHERN RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed April 23, 1897.]

### OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, HUGH PORTER, New York City.  
*Vice President*, GEO. W. DEBEVOISE, New York City.  
*Secretary*, WM. H. MURPHY, New York City.  
*Auditor*, F. H. CARROLL, Pontiac, Mich.  
*Treasurer*, HUGH PORTER, New York City.  
*General Superintendent*, W. C. SANFORD, Pontiac, Mich.  
*Cashier*, F. R. BOYD, JR., Pontiac, Mich.  
*General Passenger and Freight Agent*, W. C. SANFORD, Pontiac, Mich.  
*Attorney*, AUG. C. BALDWIN, Pontiac, Mich.

### DIRECTORS.

HUGH PORTER, New York City.  
 GEO. W. DEBEVOISE, New York City.  
 L. A. HALE, New York City.  
 WM. H. MURPHY, New York City.  
 HENRY A. O'BRIEN, New York City.  
 A. C. BALDWIN, Pontiac, Mich.  
 W. C. SANFORD, Pontiac, Mich.

Terms expire Sept. 22, 1897.

### STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: September 24, 1889.  
 Number of stockholders at date of last election: 8.  
 Number of stockholders in Michigan at same date: 2.  
 Amount of full paid stock held in Michigan at same date. \$2,000.00.  
 Date of annual meeting of stockholders: First Wednesday after the third Monday in September.  
 General offices of the company are located at Pontiac, Mich.

### GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$119,692 58
Total expenses, including taxes.....	\$81,181 21	
Net income .....		\$38,511 32
Interest on funded debt .....	5,256 68	
Balance applicable to dividends.....		\$33,254 64
Dividends declared (8 per cent).....	\$30,030 00	
Balance for the year .....		\$3,254 64
Balance (profit and loss) last year .....		9,121 03
Miscellaneous income account, debits.....	8,768 92	
Balance forward to next year.....	8,006 75	
	\$12,375 67	\$12,375 67

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$1,000,000 00
Par value of shares .....	\$100	
No. of shares issued.....	10,000	
Amount paid in on common.....		\$1,000,000 00
Total amount paid in, as per books of the company.....		1,000,000 00
Paid in per mile of road owned by company (100 miles).....		10,000 00

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage bonds .....	6%	Jan. and July ..		\$136,000 00

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For miscellaneous.....		\$23,002 01
For current balances.....		1,219 16
Total unfunded debt.....		\$24,221 17

## RECAPITULATION.

Total funded debt.....	\$136,000 00
Total unfunded debt.....	24,221 17
Total debt liabilities.....	\$160,221 17
Amount of debt liabilities per mile of road, 100 miles.....	1,602 21
Total amount of stock and debt.....	1,160,221 17
Stock and debt per mile of road, 100 miles.....	11,602 21

## GENERAL BALANCE SHEET.—Dr.

Construction account.....	\$894,339 73
Equipment account.....	118,845 55
Cash items:	
Cash.....	\$184,341 11
Due from agents.....	5,867 79
	140,208 90
Other assets:	
Materials and supplies.....	\$4,742 31
Debit balances from companies and individuals.....	5,691 43
	10,433 74
Total.....	\$1,163,827 92

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$1,000,000 00
Funded debt.....	136,000 00
Unfunded debt:	
Vouchers and accounts.....	24,221 17
Profit and loss or income accounts.....	3,606 76
Total.....	\$1,163,827 92



## COST OF ROAD AND EQUIPMENT.

*Purchased by present company.*

When purchased: Sept. 24, 1889.	
Original cost to present company, of road and equipment .....	\$1,000,000 00
Amount expended since purchase, account of construction .....	4,839 78
Amount expended since purchase, account of equipment .....	8,345 55
Total cost to date of report .....	1,013,185 28
Average cost per mile of road (not including sidings), 100 miles .....	10,181 86

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## Main line:

Extensions and new sidings .....	\$125 07
Right of way .....	200 00
New buildings .....	125 17
New fences .....	45 20
Total charges to property account as above .....	495 44

## ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

## Main line and branches:

Local fares .....	\$39,471 78
Through fares .....	931 26
Total passenger fares .....	\$39,403 04
Express and baggage .....	2,171 22
Mails .....	7,663 04
Other sources .....	12 00
Total passenger department earnings .....	\$44,249 30
Per train mile .....	\$0 55
Per mile of road .....	442 49

## FREIGHT EARNINGS.

## Main line and branches:

Local traffic .....	\$72,161 56
Through traffic .....	3,122 67
Total traffic .....	\$75,287 23
Total freight department earnings .....	75,287 23
Per train mile .....	\$0 89
Per mile of road .....	752 87

Total transportation earnings, entire line .....	\$119,536 53
Transportation earnings per mile of road .....	1,196 36
Transportation earnings per train mile .....	72 56

## Miscellaneous receipts from operating account, other than for transportation, as follows:

From rents of tracks, yards and terminals .....	120 00
From rents not otherwise provided for .....	36 00
Total .....	156 00

Total earnings from operation of road .....	\$119,692 53
Total earnings per mile of road .....	\$1,196 92
Total earnings per train mile .....	72 56
Total taxable earnings per mile of road in Michigan .....	1,196 92
Total income from all sources .....	119,692 53

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway.....	\$13,974 45
Renewal of rails.....	19 84
Renewal of ties.....	8,637 90
Repairs and renewals of bridges and culverts.....	1,185 22
Repairs and renewals of fences, road crossings, signs and cattle guards.....	774 42
Repairs and renewals of buildings and fixtures.....	870 23
Repairs and renewals of telegraph.....	98 06
Stationery and printing.....	11 00
Total.....	<u>\$25,570 92</u>

## MAINTENANCE OF EQUIPMENT.

Superintendence.....	\$1,219 54
Repairs and renewals of locomotives.....	3,417 86
Repairs and renewals of passenger cars.....	545 99
Repairs and renewals of freight cars.....	1,626 49
Repairs and renewals of work cars.....	36 31
Stationery and printing.....	11 00
Other expenses.....	76 01
Total.....	<u>\$6,943 20</u>

## CONDUCTING TRANSPORTATION.

Superintendence.....	\$1,000 00
Engine and roundhouse men.....	8,036 36
Fuel for locomotives.....	8,833 35
Water supply for locomotives.....	606 28
Oil, tallow and waste for locomotives.....	719 92
Other supplies for locomotives.....	43 30
Train service.....	5,787 69
Train supplies and expenses.....	1,072 69
Telegraph expenses.....	2,454 46
Station service.....	6,173 86
Station supplies.....	367 29
Car mileage—balance.....	1,811 38
Loss and damage.....	231 80
Injuries to person.....	79 05
Advertising.....	90 75
Outside agencies.....	253 04
Stationery and printing.....	792 58
Total.....	<u>\$38,486 80</u>

## GENERAL EXPENSES.

Salaries of general officers.....	\$2,500 00
Salaries of clerks and attendants.....	2,764 79
General office expenses and supplies.....	706 22
Law expenses.....	1,231 50
Stationery and printing (general offices).....	201 25
Other expenses.....	333 66
Taxes.....	2,393 87
Total.....	<u>\$10,181 29</u>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	31.50	\$25,570 92
Maintenance of equipment.....	8.55	6,943 20
Conducting transportation.....	47.41	38,486 80
General expenses, including taxes.....	12.54	10,181 29
Total operating expenses and taxes.....	100	<u>\$81,181 21</u>
Operating expenses and taxes per mile of road.....		\$811 81
Operating expenses and taxes per train mile run, for trains, earning revenue, 164,736 miles.....	\$0 49.28	
Total proportion of expenses for Michigan.....		<u>\$81,181 21</u>
Percentage of expenses to earnings.....	67.82	
Net earnings per mile of road.....		385 11
Net earnings per train mile.....		<u>23.37</u>

# PONTIAC, OXFORD & NORTHERN RAILROAD COMPANY. 449

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Pontiac, Mich., to Caseville, Mich., October 8, 1883.

MAIN LINE.		Miles.	Miles.
In Michigan, from Pontiac to Caseville .....			100.59
Total length completed .....			100.59
Total length of road belonging to this company in Michigan .....	100.59		
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated .....	7.61		
Aggregate length of tracks in Michigan belonging to this company, computed as single track .....			108.20
Gauge of track, 4 feet 8½ inches.			

### Number of bridges and trestles in Michigan.

	Number.	Aggregate Length, feet.
Wooden bridges .....	27	1,370
Total .....	27	1,370

### Crossings.—Railroad and highway.

What railroads cross your road at grade in this State, and at what locality?

Michigan Central R. R. at Oxford.  
Flint & Pere Marquette R. R. at Clifford.  
Saginaw, Tuscola & Huron R. R. at Pigeon.

What railroads cross your road either over or under your grade in this State, and where?

Over—  
Chicago & Grand Trunk R. R. at Imlay City.

At what crossings are interlocking and derailing switches in operation?  
Oxford.

What pattern or patterns have you adopted?

Saxby & Farmer, lever machine, made by Union Switch & Signal Co.

Number of crossings of highways at grade in this State ..... 107

Have safety guards been erected at overhead obstructions?

Yes.

Are your frogs and guard rails blocked as required by Act 174, Session Laws of 1883?

Yes.

How are they treated?

Space between rails fitted with wood blocking.

### Stations.

Number of stations on whole lines .....	22
Same in Michigan .....	22

### Employees.

Number of persons regularly employed on all roads operated by company, including officials (all in Michigan) .....	100
--------------------------------------------------------------------------------------------------------------------	-----

Classify your employes as per following list:

	Number.
Baggagemen .....	2
Brakemen .....	4
Conductors .....	3
Engineers .....	3
Firemen .....	3
Laborers .....	32
Shopmen .....	17
Others .....	36
	100

## REPAIRS AND RENEWALS.

## Fencing in Michigan.

How many miles of fencing have you .....	194.1
Give the number of miles required to complete fence both sides of your track in Michigan, and the counties in which needed:	
Tuscola county .....	.4
Huron county .....	5.5

## Road bed and track.

Number of track sections in Michigan .....	16
Average length of sections (miles) .....	6.25
Average number of men in each section gang .....	2
Number of new ties put in track in Michigan .....	35,233
Average number of new ties per mile of road .....	352.38

## Bridges and culverts.

Amount of trestle work replaced with earth during the year, linear feet .....	120
-------------------------------------------------------------------------------	-----

## ROLLING STOCK.

	Number.	Present esti- mated value.
Number of locomotives of more than 30 tons weight, exclusive of tender .....	3	\$24,345 55
Number of locomotives of 20 to 30 tons weight, exclusive of tender .....	3	18,000 00
Total .....	6	\$42,345 55
Number of passenger cars—8-wheel, including official cars .....	7	\$31,500 00
Number of express and baggage cars .....	1	2,500 00
Number of box freight cars .....	46	18,800 00
Number of stock cars .....	4	1,500 00
Number of platform cars .....	61	21,750 00
Number of conductors' way cars .....	1	450 00
Total .....	120	\$76,500 00
Number of locomotives equipped with power brakes .....		6
Number of passenger train cars equipped with power brakes .....		8

What patterns of power brakes have you in use, and number of locomotives and cars with each?  
Westinghouse automatic air brake, 8 cars, four locomotives; New York automatic air brake, 1 loco-  
motive; Eames vacuum driver brake, 1 locomotive.

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws  
of 1885, as amended by act No. 88, session laws of 1887?  
Yes.

What pattern or patterns have you adopted for use?  
Hinson.

How are your passenger cars heated?  
Hot water circulation. Mason anti-fire heaters.

## MILEAGE, TRAFFIC, ETC.

## Train mileage.

	In Michigan.
Miles run by passenger trains during the year .....	65,193
Miles run by freight trains during the year .....	38,242
Miles run by mixed trains .....	61,300
Total mileage of trains earning revenue .....	164,735

## Passenger traffic.—In State of Michigan.

	Numbers.	Miles.	Rate.
Number of through passengers carried, earning revenue .....	499		
Number of local passengers carried, earning revenue .....	61,251		
Total number of passengers carried, earning revenue .....	61,750		
Number of passengers carried one mile .....	1,369,609		
Average distance carried .....		22.1	
Average amount received from each passenger .....			\$0 55.7
Average receipts per mile for through passengers .....			01.89
Average receipts per mile for local passengers .....			02.53
Average receipts per passenger per mile for all passengers .....			02.51

*Freight traffic.—In State of Michigan.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	2,851		
Number of tons of local freight carried, earning revenue.....	83,741		
Total tons of freight carried, earning revenue.....	86,092		
Total mileage of through freight.....		216,603	
Total mileage of local freight.....		2,663,520	
Total freight mileage or tons carried one mile.....		2,880,122	
Average ton haul for through freight.....		92.1	
Average ton haul for local freight.....		31.8	
Average ton haul for all freight.....		33.4	
Average amount received for each ton haul.....			\$0 87.4
Average receipts ton per mile, for through freight.....			01.44
Average receipts ton per mile, for local freight.....			02.71
Average receipts ton per mile, for all freight.....			02.61

FREIGHT TRAFFIC MOVEMENT.—IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	12,676		12,676	14.73
Flour.....	123	108	231	.26
Hay.....	9,627	108	9,735	11.30
Fruit and vegetables.....	5,849	14	5,863	6.23
Potatoes.....	9,639		9,639	11.21
<b>Products of animals:</b>				
Live stock.....	3,686	102	3,788	4.40
Poultry, game and fish.....	293		293	.34
Wool.....	106	11	117	.14
<b>Products of mines:</b>				
Anthracite coal.....		3,271	3,271	3.80
Bituminous coal.....		8,272	8,272	9.61
Stone, sand, and other like articles.....		46	46	.05
Salt.....	390	385	775	.90
<b>Products of forest:</b>				
Lumber.....	8,934	2,854	11,788	13.69
Logs.....	1,019		1,019	1.13
Shingles, staves and barrels.....	3,130	379	3,509	4.08
<b>Manufactures:</b>				
Petroleum and other oils.....		152	152	.18
Sugar.....		65	65	.07
Iron, pig, bloom and scrap.....	170	109	279	.32
Other castings and machinery.....	73	77	150	.17
Cement, brick and lime.....	125	1,580	1,685	1.95
Agricultural implements.....		10	10	.01
Wagons, carriages, tools, etc.....	1,830	300	2,130	2.47
Wines, liquors and beers.....		36	36	.04
Household goods and furniture.....	118	58	176	.21
<b>Merchandise</b> .....	4,223	5,731	9,954	11.56
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	369	575	944	1.10
<b>Total tonnage</b> .....	61,879	24,213	86,092	100

## MICHIGAN RAILROAD RETURNS, 1896.

## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them; and do you take their freights at the depot, or at the office of such express companies?

American Express Company.

One and one-half and one and one-tenth first class freight rates and one-half fare for messengers.

General express business. Take their freights at depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

One hundred miles.

Owned jointly by P., O. & N. R. R. Co. and Western Union Telegraph Co.

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR, 1896.

## KILLED.

December 21, 1896, Lea Kelly, baggageman, Wilmot. Fell from side door of baggage car while train was standing at Wilmot, receiving injuries from which he died Dec. 23, 1896.

## INJURED.

June 10, 1896, Lea Kelly, baggageman, Pontiac. Loss of first two joints of index finger of right hand; coupling cars.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Coupling cars.....					1	
Falling from trains.....		1				
Total.....		1			1	

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year.....	1
Number of persons injured during the year.....	1
Number of casualties purely accidental.....	1
Number resulting from lack of caution, carelessness, or misconduct.....	1

## CLASSIFICATION OF EMPLOYÉS.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....	1	1	2
Total.....	1	1	2

STATE OF MICHIGAN, }  
COUNTY OF OAKLAND, } ss.

W. C. Sanford, general superintendent, and F. H. Carroll, auditor, of the Pontiac, Oxford & Northern Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. s. of R. R.]

Signed,

W. C. SANFORD,  
F. H. CARROLL.

Subscribed and sworn to before me this 22d day of April, A. D. 1897.

[L. s.]

WILL F. NORTH,  
*Notary Public, Oakland Co.*

# ANNUAL REPORT

## OF THE

### SAGINAW, TUSCOLA & HURON RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed January 25, 1897.]

#### OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, WILLIAM L. WEBBER, Saginaw, E. S., Mich.  
*Vice President*, GEORGE W. MORLEY, Saginaw, E. S., Mich.  
*Secretary*, SAMUEL G. HIGGINS, Saginaw, E. S., Mich.  
*Auditor*, LOUIS F. OHLAND, Saginaw, E. S., Mich.  
*Treasurer*, WILLIAM H. HART, Saginaw, E. S., Mich.  
*General Manager*, WILLIAM L. WEBBER, Saginaw, E. S., Mich.  
*Superintendent*, WILLIAM H. WALLACE, Saginaw, E. S., Mich.  
*Freight and Ticket Agent*, WM. B. ROSEVEAR, Saginaw, E. S., Mich.

#### DIRECTORS.

WILLIAM L. WEBBER, Saginaw, E. S., Mich.  
 GEORGE W. MORLEY, Saginaw, E. S., Mich.  
 JAMES B. PETER, Saginaw, E. S., Mich.  
 JOHN S. ESTABROOK, Saginaw, E. S., Mich.  
 SAMUEL G. HIGGINS, Saginaw, E. S., Mich.  
 WILLIAM H. HART, Saginaw, E. S., Mich.  
 ISAAC BEARINGER, Saginaw, E. S., Mich.  
 Terms expire May 21, 1897.

#### STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: February 24, 1881.  
 Number of stockholders at date of last election: 123.  
 Number of stockholders in Michigan at same date: 118.  
 Amount of full paid stock held in Michigan at same date: \$60,800.  
 Date of annual meeting of stockholders: Third Thursday of May each year.  
 Fiscal year of company ends December 31.  
 General offices of the company are located at Saginaw, E. S., Mich.

#### GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$110,708 49
Total expenses, including taxes.....	\$91,566 44	
Net income.....		\$19,137 05
Interest on unfunded debt.....	\$68,548 08	
Balance for the year.....	49,411 08	
Balance, profit and loss last year.....	209,916 14	
Items not included in above, as follows:		
Debit.....	\$5,411 11	
Credit.....	1,007 68	
	\$4,403 43	
Balance forward to next year.....		263,730 60



## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$600,000 00
Par value of shares.....	\$100 00	
Number of shares issued.....	1,233	
Amount paid in on common.....		\$123,300 00
Amount paid in on shares not issued (number), 15.....		255 38
Total amount paid in, as per book of the company.....		123,555 38
Paid in per mile of road owned by company, 66.57 .....		1,836 02

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

\$1,000,000.00 first mortgage, 40 years 5 per cent bonds authorized to be issued to the Continental Trust Company of New York as trustees. Said bonds have not been sold, but are pledged as collateral security for advances made account of construction and equipment of the road. Date of issue September 1, 1891.

The advances for which issued as above, are shown below under unfunded debt and the bonds are not treated as a funded debt on the books of this company.

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated.	Amount.
For construction.....		\$715,290 51
For equipment.....		50,059 59
For real estate.....		54,287 79
For miscellaneous.....		434,448 06
For current balances.....		8,254 25
Total unfunded debt .....		\$1,262,335 22

## RECAPITULATION.

Total unfunded debt .....	\$1,262,335 22
Total debt liabilities.....	\$1,262,335 22
Amount of debt liabilities per mile of road, 66.57 miles.....	18,962 52
Total amount of stock and debt.....	1,885,890 60
Stock and debt per mile of road, 66.57 miles.....	20,818 64

## GENERAL BALANCE SHEET.—Dr.

Construction account.....	\$760,573 84	
Equipment account.....	219,888 92	
Other investments (specifying same):		
Bay Port hotel and grounds.....	\$49,347 19	
Bay Port quarries.....	59,355 13	
General office building and grounds.....	14,597 68	
Saginaw Bay Coal Co. stock.....	1,500 00	
Other real estate.....	400 00	
	125,200 00	\$1,106,662 76
Cash items:		
Cash.....	\$3,769 59	
Bills receivable.....	1,275 54	
Due from agents.....	1,307 33	6,352 46
Other assets:		
Materials and supplies.....	\$151 56	
Debit balances from companies and individuals.....	9,968 22	
	10,144 78	
Profit and loss.....		263,730 60
Total.....		\$1,385,890 60

## GENERAL BALANCE SHEET.—Cr.

Capital stock, amount paid in .....		\$123,555 38
Unfunded debt:		
Vouchers and accounts .....	\$5,406 81	
Other liabilities:		
Co's and Ind'l's account, traffic .....	\$633 37	
Co's and Ind'l's account, equipment .....	23,390 75	
Treasurer State of Michigan, taxes 1896 .....	2,214 07	
Unclaimed wages .....	312 74	
Miscellaneous accounts .....	20 00	
Advances made, account construction and equipment and interest on same to and including December 31, 1896 .....	1,225,357 47	
		1,256,928 41
		1,263,335 22
Total .....		\$1,383,890 60

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction and equipment .....	\$980,462 76
Average cost per mile of road (not including sidings) 66.57 miles .....	14,728 29
Proportion of cost for Michigan .....	980,462 76

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Extensions and new sidings .....	\$162 68
New buildings .....	9,233 08
New locomotives .....	7,250 00
Land and land damages .....	6,370 58
Total charges .....	\$23,016 29
Total charges to property account as above .....	23,016 29
Property sold and credited .....	1,383 75
Net addition to property account .....	21,632 54

## ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

Main line and branches:		
Local fares .....	\$30,196 88	
Through fares .....	5,630 65	
Total passenger fares .....	\$35,827 53	
Express and baggage .....	727 14	
Mails .....	5,178 23	
Total passenger department earnings .....		\$41,732 90
Per train mile .....	\$0 48	
Per mile of road .....	626 90	

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic .....	\$50,096 92	
Through traffic .....	18,233 71	
Total traffic .....	\$68,350 63	
Total freight department earnings .....		\$68,350 63
Per train mile .....	1 60	
Per mile of road .....	1,026 75	
Total transportation earnings, entire line .....		\$110,083 53
Transportation earnings per mile of road .....	\$1,653 65	
Transportation earnings per train mile .....	85	

# SAGINAW, TUSCOLA & HURON RAILROAD COMPANY. 457

Miscellaneous receipts from operating account, other than for transportation, as follows:

From telegraph .....	\$619 96	
Total .....		\$619 96
Total earnings from operation of road .....	\$110,708 49	
Total earnings per mile of road .....	1,662 96	
Total earnings per train mile .....	85	
Proportion of taxable earnings for Michigan .....	110,708 49	
Total taxable earnings per mile of road in Michigan .....	1,662 96	
Income other than from earnings .....		842 82
Total income from all sources .....		\$111,546 31
Proportion of income for Michigan .....		111,546 31

## ANALYSIS OF EXPENSES.

### MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway .....	\$11,967 01
Renewals of ties .....	10,075 78
Repairs and renewals of bridges and culverts .....	1,085 13
Repairs and renewals of fences, road crossings, signs and cattle guards .....	453 24
Repairs and renewals of buildings and fixtures .....	1,648 99
Repairs and renewals of docks and wharves .....	242 86
Repairs and renewals of telegraph .....	101 75
Stationery and printing .....	17 00
Other expenses .....	861 57
Total .....	\$25,933 38

### MAINTENANCE OF EQUIPMENT.

Superintendence .....	\$1,020 00
Repairs and renewals of locomotives .....	7,732 41
Repairs and renewals of passenger cars .....	2,663 84
Repairs and renewals of freight cars .....	2,087 18
Repairs and renewals of shop machinery and tools .....	242 58
Stationery and printing .....	11 40
Other expenses .....	540 00
Total .....	\$14,312 41

### CONDUCTING TRANSPORTATION.

Superintendence .....	\$1,805 50
Engine and roundhouse men .....	7,829 61
Fuel for locomotives .....	8,421 11
Water supply for locomotives .....	470 93
Oil, tallow and waste for locomotives .....	419 23
Other supplies for locomotives .....	34 63
Train service .....	6,668 82
Train supplies and expenses .....	922 14
Switchmen, flagmen and watchmen .....	327 01
Telegraph expenses .....	2,356 24
Station service .....	4,556 79
Station supplies .....	310 28
Car mileage—Balance .....	705 22
Loss and damage .....	112 88
Advertising .....	1,337 70
Outside agencies .....	106 17
Rents for tracks, yards and terminals .....	1,200 00
Stationery and printing .....	833 61
Other expenses .....	31 95
Total .....	\$38,449 82

### GENERAL EXPENSES.

Salaries of general officers .....	\$5,216 65
Salaries of clerks and attendants .....	2,799 67
General office expenses and supplies .....	196 02
Insurance .....	1,212 22
Law expenses .....	269 12
Stationery and printing (general offices) .....	306 87
Other expenses .....	72 50
Taxes .....	2,777 78
Total .....	\$12,850 88

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures .....	28.34	\$25,953 38
Maintenance of equipment .....	15.63	14,312 41
Conducting transportation .....	41.99	88,449 82
General expenses, including taxes .....	14.04	12,850 88
Total operating expenses and taxes .....	100.00	\$91,566 44
Operating expenses and taxes per mile of road .....		\$1,375 49
Operating expenses and taxes per train mile run, for trains earning revenue, 130.143 miles .....		70
Total proportion of expenses for Michigan .....		91,566 44
Percentage of expenses to earnings .....	82.71	
Net earnings per mile of road .....		287 47
Net earnings per train mile .....		15

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

Saginaw to Sebewaing, April 4, 1882.  
 Sebewaing to Bay Port, June 15, 1884.  
 Bay Port to Bad Axe, July 1, 1886.

## MAIN LINE.

	Miles.	Miles.
In Michigan, from Saginaw to Bad Axe .....		64.38

## BRANCHES.

Bay Port from Bay Port Junction to Bay Port .....	1.38	
Quarry from Quarry Junction to Quarry .....	.81	
Total length of branches owned by company .....	2.19	
Total length of branches owned by this company in Michigan .....		2.19
Total length of road belonging to this company .....	66.57	
Total length of road belonging to this company in Michigan .....		66.57
Aggregate length in Michigan of sidings, spurs and other tracks not above enumerated .....	15.76	
Aggregate length of tracks in Michigan belonging to this company, computed as single track .....		82.33

Gauge of track, 4 feet 8½ inches.

## Number of bridges and trestles in Michigan.

	Number.	Aggregate Length, feet.
Wooden bridges .....	12	578
Iron bridges .....	1	77
Total .....	13	658

## Draw bridges in Michigan.

How many on your line?  
 One.

Where located, when built and length of draw span?  
 Sebewaing; 1891; 35 feet.

Character of structure?  
 Swing span on table pier.

Material of which constructed.  
 Iron.

Height above water, and depth of water under bridge.  
 7 feet above water; 7 feet deep.

How swung, by engine or hand power?  
 Hand.

Approaches straight or curved?  
 Straight.

Do you require all trains to come to full stop before crossing a draw, and how are they signaled?  
 Yes, during season of navigation. Signaled by flag during day and lamp at night.

*Crossings.—Railroad and highway.*

What railroads cross your road at grade in this State, and at what locality?

Flint &amp; Pere Marquette R. R. at Saginaw, E. S., Michigan.

Michigan Central R. R. at Reese, Michigan.

Pontiac, Oxford &amp; Northern R. R. at Pigeon, Michigan.

Number of crossings of highways at grade in this State.....	88
Number of crossings of highways at grade in this State at which there are gates or flagmen.....	4

Are your frogs and guard rails blocked as required by Act 174, Session Laws of 1883?  
Yes.

How are they treated?

Substantially blocked with wood.

*Stations.*

Number of stations on whole lines.....	17
----------------------------------------	----

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials.....	97
-------------------------------------------------------------------------------------------------	----

Classify your employes as per following list:

	Number.
Baggagemen.....	2
Brakemen.....	4
Conductors.....	4
Engineers.....	5
Firemen.....	5
Laborers.....	31
Shopmen.....	18
Others.....	28

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*How many miles of fencing have you:  
133.14 miles.*Road bed and track.*

Number of track sections in Michigan.....	11
Average lengths of sections, miles.....	6
Average number of men in each section gang.....	3
Number of new ties put in whole line during the year.....	39,533
Number of new ties put in track in Michigan.....	39,533
Average number of new ties per mile of road.....	595

*Bridges and culverts.*

Timber culverts replaced during the year:

With stone.....	16
-----------------	----

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender.....	9	
Number of locomotives of 20 to 30 tons weight, exclusive of tender.....	1	
Total.....	10	\$31,250 00
Number of passenger cars—8-wheel, including official cars.....	13	\$24,000 00
Number of express and baggage cars.....	3	4,500 00
Number of box freight cars.....	25	7,500 00
Number of platform cars.....	95	19,000 00
Number of conductors' way cars.....	3	1,000 00
Other cars as follows: Coal.....	50	12,500 00
Total.....	189	\$68,500 00

Number of locomotive equipped with power brakes.....	16
Number of passenger-train cars equipped with power brakes.....	16
What patterns of power brakes have you in use, and number of locomotives and cars with each? Westinghouse automatic, used on all equipment having power brakes.	
Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?	
Yes.	
What pattern or patterns have you adopted for use? Thurmond and Hinson.	
How are your passenger cars heated? By steam from locomotive.	

## MILEAGE, TRAFFIC, ETC.

*Train mileage.*

	In Michigan.
Miles run by passenger trains during the year.....	87,366
Miles run by freight trains during the year.....	42,777
Total mileage of trains earning revenue.....	130,143

*Passenger traffic.—Road all in State of Michigan.*

	Numbers.	Miles.	Rate.
Number of through passengers carried, earning revenue.....	6,084		
Number of local passengers carried, earning revenue.....	55,850		
Total number of passengers carried earning revenue.....	61,884		
Number of passengers carried one mile.....	1,653,173		
Average distance carried.....		26.7124	
Average amount received from each passenger.....			\$0 57.894
Average receipts per mile for through passengers.....			02.084
Average receipts per mile for local passengers.....			02.187
Average receipts per passenger per mile for all passengers.....			02.163

*Freight traffic.—Road all in State of Michigan.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	23,484		
Number of tons of local freight carried, earning revenue.....	71,782		
Total tons of freight carried, earning revenue.....	95,266		
Total mileage of through freight.....		798,210	
Total mileage of local freight.....		2,744,075	
Total freight mileage or tons carried one mile.....		3,542,285	
Average ton haul for through freight.....		33.9895	
Average ton haul for local freight.....		38.2278	
Average ton haul for all freight.....		37.183	
Average amount received for each ton haul.....			\$0 71.747
Average receipts ton per mile, for through freight.....			02.287
Average receipts ton per mile, for local freight.....			01.825
Average receipts ton per mile, for all freight.....			01.929

## FREIGHT TRAFFIC MOVEMENT.—ROAD ALL IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	9,489	59	9,548	10.02
Flour and provisions.....	3,767	11	3,778	3.97
Other agricultural products.....	5,120	3	5,123	5.38
<b>Products of animals:</b>				
Live stock.....	2,432	2	2,434	2.55
<b>Products of mines:</b>				
Anthracite coal.....	307	—	307	.32
Bituminous coal.....	21,296	—	21,296	22.35
Stone, sand, and other like articles.....	22,906	1,670	24,576	25.80
<b>Products of forest:</b>				
Lumber and shingles.....	4,480	40	4,520	4.74
Heading and staves.....	8,694	—	8,694	9.13
Other forest products.....	6,705	—	6,705	7.04
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	5,679	2,606	8,285	8.70
<b>Total tonnage.....</b>	<b>90,875</b>	<b>4,891</b>	<b>95,266</b>	<b>100.00</b>

## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

1. The American Express Co.
2. At 1½ first class freight rates.
3. General business.
4. Freights are delivered to this company on board of express cars at its depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

1. 67 miles.
2. belongs to the S. T. & H. R. R. Co.

## TRANSPORTATION COMPANIES.

*Sleeping, drawing-room and palace car companies.*

What sleeping, drawing-room, chair or other palace passenger cars, not the exclusive property of your own or some other railroad company, have, during the year, been in use on your road in the State of Michigan, and on what terms? If rented by you, or allowed mileage between local points in this State, what was the amount paid for the use of such cars during the period under report?

No cars of this description have been in use on this road during the year.

## MICHIGAN RAILROAD RETURNS, 1896.

*Fast freight lines.*

To what fast freight lines, or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

Name of Company.	General office.	Amount paid.
Armour Car Line.....	Chicago, Ill.....	\$2 66
Burton Stock Car Co.....	Boston, Mass.....	1 38
California Fruit Transportation Co.....	Chicago, Ill.....	1 00
Commerce Despatch Line.....	Indianapolis, Ind.....	80
Merchants' Despatch Transportation Co.....	New York City, N. Y.....	34 15
National Despatch Line.....	Boston, Mass.....	16 77
Nelson Morris & Co.....	Chicago, Ill.....	80

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

## KILLED.

July 24, Sophia Miller, old woman, Pigeon, Mich. Struck by engine of train No. 2; trespasser.

## INJURED.

June 21, Wm. Gall, laborer, Sebawaing, Mich. Fell in coal shed; leg broken; own carelessness.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Miscellaneous.....					1	
Trespassers on tracks.....			1			
Total.....			1		1	

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year.....	1
Number of persons injured during the year.....	1
Number resulting from lack of caution, carelessness, or misconduct.....	1
Trespassers and tramps killed or injured.....	1

## CLASSIFICATION OF EMPLOYÉS.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Laborers.....		1	1
Total.....		1	1



STATE OF MICHIGAN, }  
COUNTY OF SAGINAW, } ss.

W. L. Webber, president, and L. F. Ohland, auditor, of the Saginaw, Tuscola and Huron Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

WM. L. WEBBER,  
L. F. OHLAND.

Subscribed and sworn to before me this 23d day of January, A. D. 1897.  
[L. S.]

JOHN W. BILLING,  
*Notary Public.*

**THREE MONTHS' REPORT**  
**OF THE**  
**SAGINAW VALLEY & ST. LOUIS RAILROAD COMPANY,**

*For the year ending December 31, 1896.*

[Filed April 16, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President*, NATHANIEL THAYER, Boston, Mass.  
*General Auditor*, C. W. COURTRIGHT, Boston, Mass.  
*Auditor*, U. B. ROGERS, Grand Rapids, Mich.  
*Treasurer*, JAMES E. HOWARD, Grand Rapids, Mich.  
*General Manager*, CHAS. M. HEALD, Grand Rapids, Mich.  
*General Superintendent*, J. K. V. AGNEW, Grand Rapids, Mich.  
*Assistant Superintendent*, T. H. MALONE, Ionia, Mich.  
*Chief Engineer*, J. J. MOVEAN, Grand Rapids, Mich.  
*General Passenger Agent*, GEO. DEHAVEN, Grand Rapids, Mich.  
*General Freight Agent*, F. V. DAVIS, Grand Rapids, Mich.  
*Attorney*, WM. ALDEN SMITH, Grand Rapids, Mich.

**DIRECTORS.**

NATHANIEL THAYER, Boston, Mass.  
 E. V. R. THAYER, Boston, Mass.  
 H. H. HUNNEWELL, Boston, Mass.  
 GEO. WHITNEY, Boston, Mass.  
 CHARLES MERRIAM, Boston, Mass.  
 GEO. O. SHATTUCK, Boston, Mass.  
 G. ST. L. ABBOTT, Boston, Mass.  
 J. A. BURNHAM, Boston, Mass.  
 C. F. ADAMS, Boston, Mass.  
 A. H. HARDY, Boston, Mass.  
 HY. NEWCOMB, Boston, Mass.  
 F. H. DAMON, Boston, Mass.  
 CHAS. M. HEALD, Grand Rapids, Mich.

Terms expire July 8, 1896.

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: May 17, 1871.  
 Number of stockholders at date of last election: 84.  
 Number of stockholders in Michigan at same date: 66.  
 Amount of full paid stock held in Michigan at same date: \$25,200.  
 Date of annual meeting of stockholders: Second Wednesday in July.  
 Fiscal year of company ends December 31.  
 General offices of the company are located at Grand Rapids, Mich.

## GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$21,584 81
Total expenses, including taxes.....	\$18,765 05	
Net income.....		\$4,819 76
Interest on funded debt.....	\$8,920 00	
Interest on unfunded debt.....	220 50	
Rentals of buildings, tracks, etc.....	1,750 00	
Balance for the three months.....	6,070 74	
Balance (profit and loss) last year.....	190,864 97	
Balance forward.....	\$196,935 71	

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$300,000 00
Par value of shares.....	\$100 00	
Number of shares issued.....	2,533	
Amount paid in on common.....	\$255,800 00	
Amount paid in on shares not issued (number) 95.....	9,504 01	
Total amount paid in, as per books of the company.....		264,804 00
Paid in per mile of road owned by company, 35.50 miles.....		7,459 27

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of Interest.	When due.	Where payable.	Amount outstanding.
First mortgage bonds.....	8%	May 1, 1902.....	New York City...	\$446,000 00

## UNFUNDED DEBT.

For miscellaneous—to be paid from earnings.....	\$209,831 08
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## RECAPITULATION.

Total funded debt.....	\$446,000 00
Total unfunded debt.....	209,831 08
Total debt liabilities.....	\$655,831 08
Amount of debt liabilities per mile of road, 35.50 miles.....	18,460 05
Total amount of stock and debt.....	920,135 09
Stock and debt per mile of road, 35.50 miles.....	25,919 30

## GENERAL BALANCE SHEET.—Dr.

Construction account.....	\$805,016 16	
Equipment account.....	87,037 00	
		\$892,053 16
Cash items:		
Cash.....	\$1,839 43	
Due from agents.....	858 69	
		2,698 12
Other assets:		
Materials and supplies.....	\$5,614 21	
Debit balances from companies and individuals.....	24,833 69	
		30,448 10
Profit and loss.....		196,935 71
Total.....		\$920,135 09

## MICHIGAN RAILROAD RETURNS, 1896.

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$284,804 01	
Funded debt.....	446,000 00	\$710,804 01
Unfunded debt:		
Interest unpaid.....	\$104,066 67	
Vouchers and accounts.....	8,142 18	
Other Liabilities:		
Net traffic balances due other companies.....	1,465 66	
Saginaw & Grand Rapids R. R.....	37,143 27	
Detroit, Lansing & Northern R. R.....	58,473 80	209,331 06
Total.....		\$920,135 09

## COST OF ROAD AND EQUIPMENT.

Total cost for construction and equipment of road and branches built by company.

Total expended for construction and equipment.....	\$690,053 18
Average cost per mile of road (not including sidings), 33.50 miles.....	19,438 12
Proportion of cost for Michigan.....	690,053 18

## ANALYSIS OF EARNINGS.—IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

Main line and branches:		
Local fares.....	\$11,158 40	
Through fares.....	281 06	
Total passenger fares.....	\$11,439 46	
Express and baggage.....	420 00	
Mails.....	1,055 40	
Total passenger department earnings.....		\$12,914 86
Per train mile.....	\$0 79	
Per mile of road.....	286 36	

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic.....	8,230 78	
Through traffic.....	373 58	
Total traffic.....	\$8,604 36	
Total freight department earnings.....		8,604 36
Per train mile.....	\$1 23	
Per mile of road.....	190 78	
Total transportation earnings, entire lines.....		\$21,519 24
Transportation earnings per mile of road.....	477 14	
Transportation earnings per train mile.....	92	
Miscellaneous receipts from operating account, other than for transportation, as follows:		
From telegraph companies.....	15 57	
From other sources.....	50 00	
Total.....		65 57
		21,584 81
Total earnings from operation of road.....		\$21,584 81
Total earnings per mile of road.....	\$478 60	
Total earnings per train mile.....	92	
Proportion of taxable earnings for Michigan.....	21,584 81	
Total taxable earnings per mile of road in Michigan.....	478 60	
Total income from all sources.....		21,584 81
Proportion of income for Michigan.....		21,584 81

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway.....	\$2,476 45
Renewals of rails.....	180 14
Renewals of ties.....	771 19
Repairs and renewals of bridges and culverts.....	5 24
Repairs and renewals of fences, road crossings, signs and cattle guards.....	234 85
Repairs and renewal of buildings and fixtures.....	115 93
Repairs and renewals of telegraph.....	24 15
Stationery and printing.....	6 53
<b>Total.....</b>	<b>\$3,814 58</b>

## MAINTENANCE OF EQUIPMENT.

Superintendence.....	\$91 87
Repairs and renewals of locomotives.....	122 56
Repairs and renewals of passenger cars.....	122 67
Repairs and renewals of freight cars.....	587 20
Stationery and printing.....	5 81
Other expenses.....	53 31
<b>Total.....</b>	<b>\$988 43</b>

## CONDUCTING TRANSPORTATION.

Superintendence.....	\$262 44
Engine and roundhouse men.....	1,799 31
Fuel for locomotives.....	2,419 72
Water supply for locomotives.....	56 14
Oil, tallow and waste for locomotives.....	75 36
Other supplies for locomotives.....	9 88
Train service.....	1,332 79
Train supplies and expenses.....	152 48
Telegraph expenses.....	438 18
Station service.....	1,644 76
Station supplies.....	162 26
Car mileage—balance.....	903 83
Loss and damage.....	16 88
Injuries to persons.....	13 62
Advertising.....	43 50
Outside agencies.....	638 95
Stock yard and elevators.....	8 67
Stationery and printing.....	592 20
Other expenses.....	1 00
<b>Total.....</b>	<b>\$10,601 32</b>

## GENERAL EXPENSES.

Salaries of general officers.....	\$283 60
Salaries of clerks and attendants.....	835 27
General office expenses and supplies.....	29 19
Insurance.....	57 27
Law expenses.....	154 59
Stationery and printing (general offices).....	49 66
Other expenses.....	19 51
Taxes.....	431 69
<b>Total.....</b>	<b>\$1,380 78</b>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	22.75	\$3,814 53
Maintenance of equipment.....	5.90	988 42
Conducting transportation.....	63.23	10,601 32
General expenses, including taxes.....	8.12	1,380 78
<b>Total operating expenses and taxes.....</b>	<b>100.00</b>	<b>\$16,785 05</b>
Operating expenses and taxes per mile of road.....	\$371 73	
Operating expenses and taxes per train mile run, for trains, earning revenue, 23,384 miles.....	72	
<b>Proportion of operating expenses and taxes for Michigan.....</b>		<b>\$16,785 05</b>
Percentage of expenses to earnings.....	77.67	
Net earning per mile of road.....	106 87	
Net earnings per train mile.....	20	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
 From Paine's to St. Louis, January, 1873.  
 From Alma to Ithaca, March, 1883.

MAIN LINE.		Miles.	Miles
In Michigan, from Paine's to St. Louis.....		28.60	
Total length completed.....			28.60
BRANCHES.			
From Alma to Ithaca.....	6.90		
Total length of branches owned by company.....			6.90
Total length of branches owned by company in Michigan.....	6.90		
Total length of road belonging to this company.....			35.50
Total length of road belonging to this company in Michigan.....	35.50		
Aggregate length of sidings, spurs and other tracks not above enumerated.....			4.12
Aggregate length of tracks in Michigan belonging to this company computed as single track.....			39.52
Gauge of track, 4 feet 8½ inches.			

*Proprietary or leased roads operated by this company.*

Name, description and length of each:	In Michigan.
Saginaw & Grand Rapids R. R., St. Louis to Alma.....	3.60
Jackson, Lansing & Saginaw R'y, East Saginaw to Paine's.....	6.00
Total.....	9.60
Total miles operated by company.....	45.10

*Number of bridges and trestles in Michigan.*

	Number.	Aggregate length, feet.
Wooden bridges.....	2	63
Wooden trestles.....	6	478
Total.....	8	541

*Crossings.—Railroad and highway.*

What railroads cross your road at grade in this State, and at what locality?  
 Ann Arbor R. R. at St. Louis.

Number of crossings of highways at grade in this State..... 65

Are your frogs and guard rails blocked as required by act 174, session laws 1883?  
 Yes.

How are they treated?  
 Hart guard and blocked with plank.

*Stations.*

Number of stations on whole line.....	13
Same in Michigan.....	13

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials.....	55
Same in Michigan.....	55

Classify your employes as per following list:

	Number.
Passengemen.....	1
Brakemen.....	4
Conductors.....	3
Engineers.....	3
Fireman.....	3
Laborers.....	19
Others.....	22

# SAGINAW VALLEY & ST. LOUIS RAILROAD COMPANY. 469

## REPAIRS AND RENEWALS.

### Fencing in Michigan.

How many miles of fencing have you?  
78.14 miles.

	Road bed and track.	
Number of track sections in Michigan .....		7
Average lengths of section (miles) .....	5.63	
Average number of men in each section gang .....		3
Number of new ties put in whole line during the three months .....		10
Number of new ties put in track in Michigan .....		10

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of 20 to 30 tons weight, exclusive of tender .....	3	\$7,500 00
Total .....	3	\$7,500 00
Number of passenger cars—8 wheel, including official cars .....	2	\$5,000 00
Number of express and baggage cars .....	1	1,500 00
Number of box freight cars .....	10	2,500 00
Number of platform cars .....	40	7,000 00
Number of conductor's way cars .....	2	400 00
Total .....	55	23,900 00

Number of locomotives equipped with power brakes .....	3
Number of passenger-train cars equipped with power brakes .....	3
What patterns of power brakes have you in use, and number of locomotives and cars with each?	
Westinghouse—locomotives .....	3
passenger cars .....	3

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?  
Yes.

What pattern or patterns have you adopted for use?  
Gould Automatic.

How are your passenger cars heated.  
Steam.

## MILEAGE, TRAFFIC, ETC.

	In Michigan.
Miles run by passenger trains during the year .....	16,416
Miles run by freight trains during the year .....	6,968
Miles run by mixed trains .....	308
Total mileage of trains earning revenue .....	23,384

### Passenger traffic.—Road all in State of Michigan.

	Numbers.	Miles.	Rate.
Number of through passengers carried earning revenue .....	230		
Number of local passengers carried earning revenue .....	21,736		
Total number of passengers carried earning revenue .....	21,966		
Number of passengers carried one mile .....	417,897		
Average distance carried .....		19.007	
Average amount received from each passenger .....			\$0 52.081
Average receipts per mile for through passengers .....			02.716
Average receipts per mile for local passengers .....			02.738
Average receipts per passenger per mile for all passengers .....			02.737

### Freight traffic.—Road all in State of Michigan.

	Tons.	Miles.	Rate.
Number of tons of through freight carried earning revenue .....	258		
Number of tons of local freight carried earning revenue .....	19,208		
Total tons of freight carried earning revenue .....	19,466		
Total mileage of through freight .....		11,610	
Total mileage of local freight .....		420,755	
Total freight mileage or tons carried one mile .....		432,365	
Average ton haul for through freight .....		45.000	
Average ton haul for local freight .....		21.905	
Average ton haul for all freight .....		22.211	
Average amount received for each ton haul .....			\$0 44.202
Average receipts ton per mile, for through freight .....			03.218
Average receipts ton per mile, for local freight .....			01.956
Average receipts ton per mile, for all freight .....			01.990

## FREIGHT TRAFFIC MOVEMENT.—ROAD ALL IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	796	3	799	4.10
Flour.....	102	24	126	.66
Other mill products.....	22	11	33	.17
Hay.....	175	—	175	.90
Fruit and vegetables.....	40	17	57	.29
<b>Products of animals:</b>				
Live stock.....	90	4	94	.43
Dressed meats.....	94	9	103	.53
Other packing house products.....	17	3	20	.10
Poultry, game and fish.....	5	—	5	.03
Hides and leather.....	9	10	19	.10
<b>Products of mines:</b>				
Anthracite coal.....	45	—	45	.23
Bituminous coal.....	45	—	45	.23
Stone, sand and other like articles.....	—	15	15	.08
Salt.....	1,784	2	1,786	9.17
<b>Products of forest:</b>				
Lumber.....	6,061	7,108	13,164	67.63
<b>Manufactures:</b>				
Petroleum and other oils.....	122	17	139	.71
Castings and machinery.....	43	61	104	.54
Cement, brick, and lime.....	137	26	162	.83
Agricultural implements.....	24	9	33	.17
Wagons, carriages, tools, etc.....	5	—	5	.03
Wines, liquors and beers.....	23	28	51	.26
Household goods and furniture.....	88	56	144	.74
<b>Merchandise.....</b>	<b>715</b>	<b>506</b>	<b>1,221</b>	<b>6.27</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	1,061	60	1,121	5.76
<b>Total tonnage.....</b>	<b>11,503</b>	<b>7,963</b>	<b>19,466</b>	<b>100.00</b>

## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The American Express Co. They handle their own freight.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
32.19. Western Union Telegraph Co.

STATE OF MICHIGAN, } ss.  
COUNTY OF KENT, }

Charles M. Heald, general manager, and U. B. Rogers, auditor, of the Saginaw Valley & St. Louis Railroad Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of March, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

CHAS. M. HEALD,  
U. B. ROGERS.

Subscribed and sworn to before me this 14th day of April, A. D. 1897.

[L. S.]

ERNEST N. WELLER,  
Notary Public, Kent Co., Mich.



THREE MONTHS' REPORT  
OF THE  
SAGINAW & GRAND RAPIDS RAILROAD COMPANY,

*For the three months ending March 31, 1898.*

[Filed April 24, 1897.]

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OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, NATHANIEL THAYER, Boston, Mass.  
*Secretary*, JAMES E. HOWARD, Grand Rapids, Mich.  
*Treasurer*, JAMES E. HOWARD, Grand Rapids, Mich.

DIRECTORS.

NATHANIEL THAYER, Boston, Mass.  
E. V. R. THAYER, Boston, Mass.  
CHARLES MERRIAM, Boston, Mass.  
G. O. SHATTUCK, Boston, Mass.  
A. H. HARDY, Boston, Mass.  
JNO. A. BURNHAM, Boston, Mass.  
H. H. HUNNEWELL, Boston, Mass.  
GEO. WHITNEY, Boston, Mass.  
HENRY NEWCOMB, Boston, Mass.  
G. ST. L. ABBOTT, Boston, Mass.  
W. HUNNEWELL, Boston, Mass.  
F. H. DAMON, Boston, Mass.  
CHAS. M. HEALD, Grand Rapids, Mich.  
Terms expire July 8, 1898.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: October 12, 1878.  
Number of stockholders at date of last election: 24.  
Number of stockholders in Michigan at same date: 1.  
Amount of full paid stock held in Michigan at same date: \$100.00.  
Date of annual meeting of stockholders: Second Wednesday in July.  
Fiscal year of company ends December 31.  
General offices of the company are located at Grand Rapids, Mich.

REMARKS.

This road is leased to the Saginaw Valley & St. Louis railroad Company during the corporate existence of both companies, the Saginaw Valley and St. Louis Railroad Company paying a dividend of ten per cent upon the stock of this company, as rental, two per cent of which is set aside to purchase the stock of the Saginaw & Grand Rapids Railroad Company for the use and benefit of the Saginaw Valley & St. Louis Railroad Company at an agreed price.

## MICHIGAN RAILROAD RETURNS, 1896.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association .....		\$1,000,000 00
Par value of shares .....	\$100 00	
Average price received per share .....	100 00	
Number of shares issued .....	700	
Amount paid in on common .....		\$70,000 00
Total amount paid in as per books of the company .....		70,000 00
Paid in per mile of road owned by company, 3.60 miles .....		19,444 44

## RECAPITULATION.

Total debt liabilities .....		\$70,000 00
Amount of debt liabilities per mile of road, 3.60 miles .....		19,444 44

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction .....	\$70,000 00
Average cost of construction per mile of road (not including sidings), 3.60 miles .....	19,444 44
Proportion of cost of construction for Michigan .....	All.

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
May, 1879.

## MAIN LINE.

	Miles.
Length completed in Michigan, St. Louis to Alma .....	3.60
Total length completed .....	3.60
Total length of road belonging to this company .....	3.60
Total length of road belonging to this company in Michigan .....	3.60
Aggregate length of tracks belonging to this company, computed as single track .....	3.60
Gauge of track, 4 feet 8½ inches.	

STATE OF MASSACHUSETTS, } ss.  
COUNTY OF SUFFOLK,

Nathaniel Thayer, president, and James E. Howard, secretary, of the Saginaw & Grand Rapids Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of March, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

N. THAYER, President.

JAMES E. HOWARD, Secretary.

Subscribed and sworn to before me this 22d day of April, A. D. 1897.

By N. Thayer.

[L. S.]

F. H. DAMON,  
Notary Public.

STATE OF MICHIGAN, } ss.  
COUNTY OF KENT,

Subscribed and sworn to before me this 13th day of April, A. D. 1897, as to James E. Howard.

[L. S.]

ERNEST N. WELLER,  
Notary Public, Kent county, Mich.

**ANNUAL REPORT**  
**OF THE**  
**SAULT STE. MARIE BRIDGE COMPANY,**

*For the year ending December 31, 1886.*

[Filed April 12, 1887.]

**OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.**

*President, CALVIN S. BRICE, New York.*

*Secretary and Treasurer, GEO. H. CHURCH, 46 Wall St., New York.*

**ORGANIZATION, ETC.**

When chartered or articles of association filed: March 16, 1887.  
 Number of stockholders at date of last election: 12.  
 Number of stockholders in Michigan at same date: 1.  
 Date of annual meeting of stockholders: First Wednesday in June each year.  
 General offices of the company are located at 46 Wall St., New York.

**STOCKHOLDERS, DECEMBER 31, 1886.**

Name.	Residence.	Amount held.
Calvin S. Brice.....	New York City.....	\$100 00
George T. Bliss.....	" " ".....	100 00
George H. Church.....	" " ".....	249,800 00
Stillman Gray.....	" " ".....	100 00
Charles F. Halsted.....	" " ".....	499,500 00
Thomas Lowry.....	Minneapolis.....	100 00
James McMillen.....	Detroit.....	100 00
Thomas G. Shaughnessy.....	Montreal.....	100 00
L. F. Sullivan.....	New York City.....	249,800 00
Samuel Thomas.....	" " ".....	100 00
Sir Wm. C. Van Horne.....	Montreal.....	100 00
Walter Watson.....	New York City.....	100 00
Total.....		\$1,000,000 00

**ANALYSIS OF DEBT ACCOUNTS.**

**FUNDED DEBT.**

Character and date of issue.	Rate of interest.	When due.	Payable when.	Amount outstanding.
First mort. (\$1,000) bonds dated July 1, 1887.	5%	Jan. 1, & July 1.	July 1, 1887.....	\$900,000 00

## MICHIGAN RAILROAD RETURNS, 1896.

## RECAPITULATION.

Total indebtedness.....	\$900,000 00
Total stock and debt.....	<u>1,900,000 00</u>

## COST.

Total cost of bridge and belongings .....	<u>\$1,900,000 00</u>
-------------------------------------------	-----------------------

## TRACK.

Length of single main track—feet.....	6,421
Length of single main track—feet in Michigan.....	<u>1,900</u>

## ANALYSIS OF EARNINGS AND EXPENSES.

## EARNINGS.

From rentals or tolls: Under agreement with Canadian Pacific Railway Company, Duluth, South Shore & Atlantic Railway and the Minneapolis, St. Paul and Sault Ste. Marie Railway, the amount paid for use of bridge is to be the expenses of operating, and the interest and sinking fund on the bonded debt and no more.

Total earnings on entire track.....	\$63,085 30
Proportion of total earning on 1,900 feet of track in Michigan.....	<u>18,667 20</u>

## EXPENSES.

## Operating.

Salaries of officers and clerks }	
Management and maintenance }	\$11,217 08
Taxes.....	874 19
Interest on first mortgage bonds.....	45,000 00
Miscellaneous, sinking fund .....	<u>5,500 00</u>

## Property account.

For renewals and improvements.....	694 08
Total.....	<u>\$63,085 30</u>

## RECAPITULATION.

Expenses for operating and taxes.....	\$11,891 22
Expenses for property account.....	694 08
Total expenses for the year.....	<u>\$12,585 30</u>
Interest on bonds and sinking fund.....	<u>50,500 00</u>

## VERIFICATION.

STATE OF NEW YORK, } ss.  
COUNTY OF NEW YORK, }

Calvin S. Brice, president, and George H. Church, secretary of the Sault Ste. Marie Bridge Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of the said company and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. E.]

Signed,

CALVIN S. BRICE,  
GEO. H. CHURCH.

Subscribed and sworn to before me this 9th day of April, A. D. 1897.

[L. S.]

CHARLES T. SMITH,  
Notary Public, Queens Co.

Certificate filed in New York Co.

ANNUAL REPORT  
OF THE  
SOUTH HAVEN & EASTERN RAILROAD COMPANY.

*For the year ending December 31, 1896.*

[Filed February 4, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, R. B. DODSON, New York, N. Y.  
*Secretary*, W. G. SNOW, New York, N. Y.  
*Auditor*, ERNEST F. EILERT, Paw Paw, Mich.  
*Treasurer*, R. B. DODSON, New York, N. Y.  
*General Manager*, M. V. MEREDITH, Paw Paw, Mich.  
*General Passenger Agent*, M. V. MEREDITH, Paw Paw, Mich.  
*General Freight Agent*, M. V. MEREDITH, Paw Paw, Mich.  
*Attorney*, HOWARD J. MANSFIELD, New York, N. Y.

DIRECTORS.

CHAS. D. BACKUS, New York, N. Y.  
W. G. SNOW, New York, N. Y.  
R. B. DODSON, New York, N. Y.  
CHAS. H. CAMPBELL, Detroit, Mich.  
CHAS. J. MONROE, South Haven, Mich.

Terms expire May 23, 1895, or when successors are elected by stockholders.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: April 21, 1876, T. & S. H. R. R.; May 23, 1894, S. H. & E. R. R.  
Number of stockholders at date of last election: 8.  
Number of stockholders in Michigan at same date: 2.  
Date of annual meeting of stockholders: Third Thursday in May at South Haven, Mich.  
Fiscal year of company ends: December 31.  
General offices of the company are located at Paw Paw, Mich.

GENERAL EXHIBIT.

	Debit. .	Credit.
Total earnings from operation.....		\$27,786 08
Total expenses, including taxes.....	\$32,748 46	
Net deficit.....	\$4,962 38	
Interest on unfunded debt.....	527 33	
Balance for the year.....	\$5,489 71	
Balance (profit and loss) last year.....		5,514 29
Balance forward to next year.....		24 58

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$300,000 00
Par value of shares.....	\$100 00	
Number of shares issued.....	2,185	
Amount paid in on common.....	\$218,500 00	
Total amount paid in, as per books of the company.....		218,500 00
Paid in per mile of road owned by company, 36.60 miles.....		5,969 95

## MICHIGAN RAILROAD RETURNS, 1896.

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
1st mortgage bonds, April 1, 1895.....	*	April 1, 1925....	New York City....	\$216,000 00

\* At 3 per cent for two years, then 4 per cent for three years, then 5 per cent until maturity.

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For miscellaneous .....	.....	\$7,000 00
For current balances .....	.....	1,577 00
Total unfunded debt.....	.....	\$8,577 00

## RECAPITULATION.

Total funded debt .....	\$216,000 00
Total unfunded debt .....	8,577 00
Total debt liabilities .....	\$224,577 00
Amount of debt liabilities per mile of road, 36.60 miles.....	6,185 98
Total amount of stock and debt.....	443,077 00
Stock and debt per mile of road, 36.60 miles .....	12,105 92

## GENERAL BALANCE SHEET.—Dr.

Construction account .....	}	\$439,558 19
Equipment account .....		
Cash items:		
Cash.....	\$1,533 89	
Due from agents .....	642 29	2,175 78
Other assets:		
Debit balances from companies and individuals .....		1,367 71
Total.....		\$443,101 58

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$218,500 00	
Funded debt.....	216,000 00	
		\$434,500 00
Unfunded debt:		
Notes payable .....	\$7,000 00	
Vouchers and accounts.....	1,577 00	
Profit and loss or income accounts.....	24 58	8,601 58
Total.....		443,101 58

## COST OF ROAD AND EQUIPMENT.

## PURCHASED BY PRESENT COMPANY.

When purchased by present company: May 23, 1894.	
Original cost to present company, of road and equipment.....	\$430,241 21
Amount expended since purchase, account of construction .....	}
Amount expended since purchase, account of equipment .....	
Total cost to date of report.....	\$439,558 19
Average cost per mile of road (not including sidings), 36.60 miles.....	12,009 79

## ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

Main line and branches:	
Local fares .....	\$13,623 84
Total passenger fares .....	\$13,623 84
Express and baggage .....	1,228 01
Mails .....	1,880 14
Total passenger department earnings .....	\$16,731 99
Per train mile .....	\$1 27½
Per mile of road .....	457 16

## FREIGHT EARNINGS.

Main line and branches:	
Local traffic .....	10,572 35
Total freight department earnings .....	10,572 35
Per train mile .....	\$0 17½
Per mile of road .....	288 86
Total transportation earnings, entire line .....	\$27,304 34
Transportation earnings per mile of road .....	746 02
Transportation earnings per train mile .....	44½
Miscellaneous receipts from operating account, other than for transportation, as follows:	
From telegraph companies .....	59 80
From other sources .....	421 94
Total .....	\$27,786 08
Total earnings from operation of road .....	\$27,786 08
Total earnings per mile of road .....	759 18
Total earnings per train mile .....	45½
Proportion of taxable earnings for Michigan .....	27,786 08
Total taxable earnings per mile of road in Michigan .....	759 18
Total income from all sources .....	\$27,786 08
Proportion of income for Michigan .....	27,786 08

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway .....	\$6,242 65
Renewals of rails .....	2,484 37
Renewals of ties .....	3,000 01
Repairs and renewals of bridges and culverts .....	97 93
Repairs and renewals of fences, road crossings, signs and cattle guards .....	44 03
Repairs and renewals of buildings and fixtures .....	239 84
Repairs and renewals of telegraph .....	24 50
Other expenses .....	41 37
Total .....	\$12,174 22

## MAINTENANCE OF EQUIPMENT.

Repairs and renewals of locomotives .....	\$3,851 53
Repairs and renewals of passenger cars .....	96 75
Repairs and renewals of freight cars .....	1,025 73
Repairs and renewals of work cars .....	200 00
Repairs and renewals of shop machinery and tools .....	301 57
Other expenses .....	29 77
Total .....	\$5,504 35

## CONDUCTING TRANSPORTATION.

Engine and roundhouse men .....	\$1,904 42
Fuel for locomotives .....	3,491 06
Water supply for locomotives .....	211 41
Oil, tallow and waste for locomotives .....	239 20
Other supplies for locomotives .....	44 92
Train service .....	1,617 61
Train supplies and expenses .....	131 57
Station service .....	3,073 38
Station supplies .....	353 50
Loss and damage .....	78 61
Advertising .....	27 00
Other expenses .....	156 25
Total .....	\$11,333 93

## GENERAL EXPENSES.

Salaries of general officers.....	\$1,941 05
Salaries of clerks and attendants.....	675 00
General office expenses and supplies.....	56 68
Insurance.....	69 84
Stationery and printing (general offices).....	134 18
Other expenses.....	306 97
Taxes.....	552 74
<b>Total.....</b>	<b>\$3,735 96</b>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	37.46	\$12,174 22
Maintenance of equipment.....	16.64	5,504 35
Conducting transportation.....	34.50	11,893 93
General expenses, including taxes.....	11.40	3,735 96
<b>Total operating expenses and taxes.....</b>	<b>100.</b>	<b>\$32,748 46</b>
Operating expenses and taxes per mile of road.....	\$394 77	
Operating expenses and taxes per train mile run, for trains, earning revenue [61.220] miles.....	.53%	
Proportion of operating expenses and taxes for Michigan—Main line.....		\$32,748 46
Percentage of expenses to earnings.....	112	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Lawton to South Haven, August, 1887.

## MAIN LINE.

	Miles.	Miles.
In Michigan, from Lawton to South Haven.....	36.60	
Total length completed.....		36.60
Total length of road belonging to this company.....		36.60
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated.....	1.20	
Aggregate length of tracks in Michigan belonging to this company, computed as single track.....		37.80
Gauge of track, 3 feet.		

## Number of bridges and trestles in Michigan.

	Number.	Aggregate length, feet.
Wooden bridges.....	8	750
<b>Total.....</b>	<b>8</b>	<b>750</b>

## Crossings.—Railroad and highway.

What railroads cross your road at grade in this State and at what locality?  
C. & W. M. R. R. at Hartford.  
Michigan Central R. R. at South Haven.

At what crossings are interlocking and derailling switches in operation?  
C. & W. M. R. R. crossing at Hartford.

What pattern or patterns have you adopted?  
Scotch-block.

Are your frogs and guard rails blocked as required by Act 174, Session Laws 1887?  
Yes.

How are they treated?  
With wood.

## Stations.

Number of stations on whole lines.....	9
Same in Michigan.....	9



*Employees.*

Number of persons regularly employed on all roads operated by company, including officials	44
Same in Michigan	44

Classify your employes as per following list:

	Number.
Baggagemen	1
Brakemen	1
Conductors	2
Engineers	2
Firemen	1
Laborers	24
Shopmen	3
Yardmen	1
Others	3
Agents	6

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you?	48
Give the number of mil-s required to complete fence both sides of your track in Michigan, and the counties in which needed.	25

*Road bed and track.*

Number of track sections in Michigan	6
Average length of sections (miles)	6
Average number of men in each section gang	4
Number of new ties put in whole line during the year	18,629
Number of new ties put in track in Michigan	18,629
Average number of new ties per mile of road	368
New rails put in track:	
Steel (tons 105¼), miles 1¼	1¼
Total miles of track laid with new rails	1¼

*Bridges and culverts.*

Timber culverts replaced during the year	50 feet
------------------------------------------	---------

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of 10 to 20 tons weight, exclusive of tender	3	\$6,000 00
Total	3	\$6,000 00
Number of passenger cars—8-wheel, including official cars	7	\$3,500 00
Number of express and baggage cars	1	200 00
Number of box freight cars	11	1,500 00
Number of platform cars	13	1,400 00
Other cars as follows: Snow plow	1	300 00
Total	33	\$12,900 00

Number of locomotives equipped with power brakes	2
Number of passenger-train cars equipped with power brakes	4

What patterns of power brakes have you in use, and number of locomotives and cars with each?  
Westinghouse—Engines, 2; coaches, 4.

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?  
No. Expect to make standard gauge.

How are your passenger cars heated.  
Stoves, Baker heater and steam direct from engines.

## MILEAGE TRAFFIC, ETC.

*Train mileage.*

	In Michigan.
Miles run by mixed trains during the year	61,220
Total mileage of trains earning revenue	61,220

## MICHIGAN RAILROAD RETURNS, 1896.

*Passenger traffic.—In State of Michigan.*

	Numbers.	Miles.	Rate.
Number of local passengers carried, earning revenue.....	33,062		
Total number of passengers carried, earning revenue.....	33,062		
Number of passengers carried one mile.....	462,868		
Average distance carried.....		14	
Average amount received from each passenger.....			\$0 41
Average receipts per mile for local passengers.....			08
Average receipts per passenger per mile for all passengers.....			08

*Freight traffic.—In State of Michigan.*

	Tons.	Miles.	Rate.
Number of tons of local freight carried, earning revenue.....	8,275		
Total tons of freight carried, earning revenue.....	8,275		
Total freight mileage or tons carried one mile.....		182,050	
Average ton haul for all freight.....		22	
Average amount received for each ton haul.....			\$1 28
Average receipts ton per mile for local freight.....			.06
Average receipts ton per mile for all freight.....			08

## FREIGHT TRAFFIC MOVEMENT.—IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight received from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	753		753	9.
Flour.....	91		91	1.
Hay.....	69		69	.70
Fruit and vegetables.....	3,148		3,148	39.25
Potatoes.....	13		13	.15
<b>Products of animals:</b>				
Live stock.....	8		8	.10
Dressed meats.....	15		15	.17
Poultry, game and fish.....	20		20	.23
<b>Products of mines:</b>				
Anthracite coal.....		527	527	6.15
Bituminous coal.....		157	157	2.00
Salt.....				
<b>Products of forest:</b>				
Lumber.....		543	543	6.50
Logs.....	896		896	10.75
Shingles.....		141	141	1.60
<b>Manufactures:</b>				
Petroleum and other oils.....		62	62	.75
Sugar.....		104	104	1.25
Castings and machinery.....	26	42	68	.85
Cement, brick and lime.....	134	62	196	2.35
Agricultural implements.....	10	35	45	.45
Wagons, carriages, tools, etc.....	9	15	24	.25
Wines, liquors and beers.....		46	46	.50
Household goods and furniture.....	46	34	80	1.
<b>Merchandise.....</b>	<b>318</b>	<b>951</b>	<b>1,269</b>	<b>15.</b>
<b>Total tonnage.....</b>	<b>5,536</b>	<b>2,719</b>	<b>8,275</b>	<b>100.</b>

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Co.; an agreed basis per cwt.; we take their freight at our depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
37 miles; belongs to South Haven & Eastern R. R. Co.

STATE OF MICHIGAN, } ss.  
COUNTY OF VAN BUREN, }

M. V. Meredith, general manager, of the South Haven & Eastern Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declares them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of his knowledge and belief.

[L. S. OF E. E.]

Signed,

M. V. MEREDITH, *Gen. Man.*

ERNEST F. EILERT, *Auditor.*

Subscribed and sworn to before me this 30th day of January, A. D. 1897.

[L. S.]

T. J. CAVANAUGH,

*Notary Public in and for Van Buren Co., Mich.*

ANNUAL REPORT  
OF THE  
ST. CLAIR TUNNEL COMPANY,

*For the year ending December 31, 1896.*

[Filed April 6, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, CHARLES M. HAYS, Montreal, Can.  
*Vice President*, JOHN BELL, Belleville, Can.  
*Secretary and Treasurer*, CHARLES PERCY, Montreal, Can.  
*General Superintendent*, F. H. MCGUIGAN, Montreal, Can.  
*Chief Engineer*, JOSEPH HOBSON, Montreal, Can.  
*Attorney*, E. W. MEDDAUGH, Detroit, Mich.

DIRECTORS.

CHARLES M. HAYS, Montreal.  
JOHN BELL, Belleville.  
HON. A. VIDAL, Sarnia.  
CHAS. MACKENZIE, Sarnia.  
W. J. SPICER, Detroit.  
E. W. MEDDAUGH, Detroit.  
F. H. MCGUIGAN, Montreal.

Terms expire September, 1897.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: October 13, 1886 and November 24, 1886.  
Number of stockholders at date of last election: 8.  
Number of stockholders in Michigan at same date: 2.  
Amount of full paid stock held in Michigan at same date: \$7,500 paid on \$15,000 stock held.  
Date of annual meeting of stockholders: Last Wednesday in September.  
Fiscal year of company ends June 30.  
General offices of the company are located at Montreal, Can.

REMARKS.

This company derives its revenue from tolls levied upon rolling stock passing through the tunnel. The company haul trains through the tunnel with their own locomotives and train crews, and to that extent only perform the functions of a railway company. Hence many of the statistics asked for in this report, and which pertain to the operations of a railway company proper, cannot be given as no records are kept.

GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$283,153 50
Total expenses, including taxes .....	\$91,083 42	
Net income .....		\$142,070 08
Interest on funded debt.....	\$125,000 00	
Balance for the year.....		\$17,070 08
Balance (profit and loss) last year.....	\$29,792 07	
Balance forward to next year.....	\$12,721 99	

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association .....	\$700,000 00
Par value of shares .....	\$100 00
Number of shares issued .....	7,000
Amount paid in on common .....	50%
Total amount paid in as per books of the company .....	\$350,000 00
Paid in per mile of road owned by company, 2¼ miles .....	155,555 00

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage bonds .....	5%	July 1, 1940 .....	Montreal .....	\$2,500,000 00

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated.	Amount.
For current balances .....	.....	\$12,721 99

## RECAPITULATION.

Total funded debt .....	\$2,500 000 00
Total unfunded debt .....	12,721 99
Total debt liabilities .....	\$2,512,721 99
Amount of debt liabilities per mile of road, 2¼ miles .....	1,116,765 83
Total amount of stock and debt .....	2,882,721 99
Stock and debt per mile of road, 2¼ miles .....	1,272,820 88

## GENERAL BALANCE SHEET.—Dr.

Construction account .....	\$2,740,772 18
Equipment account .....	69,988 31
Other investments:	
Land and land damages .....	113,614 31
Machinery and tools .....	275,091 21
Miscellaneous expenses .....	23,754 30
Debit balances from companies and individuals .....	\$3,223,170 61
Total .....	14,551 88
Total .....	\$3,237,721 99

## GENERAL BALANCE SHEET.—Cr.

Capital stock (paid up) .....	\$350,000 00
Funded debt .....	2,500,000 00
Government subsidy .....	375,000 00
Unfunded debt:	
Vouchers and accounts .....	12,721 99
Total .....	\$3,237,721 99

## COST OF ROAD AND EQUIPMENT.

Total cost for construction and equipment of road and branches built by company.

Total expended for construction and equipment .....	\$3,237,170 61
Average cost per mile of road (not including sidings) .....	1,432,520 27
Proportion of cost for Michigan .....	1,611,585 30

## MICHIGAN RAILROAD RETURNS, 1896.

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

Property sold and credited.....	\$182 12
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## ANALYSIS OF EARNINGS.—IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

Tolls on passenger cars.....	\$21,818 00
Per mile of road.....	19,838 22

## FREIGHT EARNINGS.

Tolls on freight cars and new locomotives.....	\$94,758 25
Per mile of road.....	84,229 65

## ANALYSIS OF EARNINGS.—ENTIRE LINES.

## PASSENGER EARNINGS.

Tolls on passenger cars.....	\$43,636 00
Per mile of road.....	19,838 22

## FREIGHT EARNINGS.

Tolls on freight cars and new locomotives.....	\$189,516 50
Per mile of road.....	84,229 65

Total transportation earnings, entire line.....	\$233,152 50
Transportation earnings per mile of road.....	\$103,623 38
Miscellaneous receipts from operating account, other than for transportation, as follows:	
From rents not otherwise provided for.....	1 00
Total.....	\$233,153 50
Proportion of taxable earnings for Michigan.....	116,576 75
Total taxable earnings per mile of road in Michigan.....	103,623 77
Total income from all sources.....	233,153 50
Proportion of income for Michigan.....	116,576 75

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Maintenance of way and structures.....	\$5,483 84
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## MAINTENANCE OF EQUIPMENT.

Motive power charges.....	\$51,400 73
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## CONDUCTING TRANSPORTATION.

Transportation charges.....	\$25,344 92
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## GENERAL EXPENSES.

General charges.....	\$3,769 50
Taxes.....	5,064 43
Total.....	\$8,833 93

## RECAPITULATION OF EXPENSES.

Maintenance of way and structures.....	\$5,483 84
Maintenance of equipment.....	51,400 73
Conducting transportation.....	25,344 92
General expenses, including taxes.....	8,833 93
Total operating expenses and taxes.....	\$91,063 42

## ST. CLAIR TUNNEL COMPANY.

485

Operating expenses and taxes per mile of road.....	\$40,481 53
Proportion of operating expenses and taxes for Michigan.....	45,541 71
Percentage of expenses to earnings.....	39.06
Net earnings per mile of road.....	63,142 25

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Sarnia to Port Huron, for freight traffic, October 24, 1891; for passenger traffic, December 7, 1891.

MAIN LINE.		Miles.	Miles.
In Michigan.....		1.12½	
In Canada.....		1.12½	
Total length of road belonging to this company.....			2.25
Total length of road belonging to this company in Michigan.....		1.12½	

Gauge of track, 4 feet 8½ inches.

*Employés.*

Number of persons regularly employed on all roads operated by company, including officials.....

55

Same in Michigan.....

19

Classify your employés as per following list:

Number

Brakemen.....	10
Conductors.....	3
Engineers.....	6
Firemen.....	6
Laborers.....	5
Others.....	23
Total.....	55

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you?..... 1.01

*Road Bed and Track.*

Number of track sections in Michigan.....	1
Average lengths of sections (miles).....	1.12½
Average number of men in each section gang.....	3
Number of new ties put in whole line during the year.....	143
Average number of new ties per mile of road.....	63
New rails put in track:	
Steel [tons 13¼] miles.....	.086

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender.....	4	\$14,000 00
Number of conductors' way cars.....	9	\$800 00
Number of locomotives equipped with power brakes.....		4

What patterns of power brakes have you in use, and number of locomotives and cars with each?  
Westinghouse air brakes.CITY OF MONTREAL, } ss.  
COUNTY OF HOCHELAGA, }

We, Charles M. Hays, president, and Chas. Percy, secretary and treasurer, of the St. Clair Tunnel Company, being duly sworn, depose and say that we have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of our knowledge and belief.

[L. S. OF E. E.]

Signed,

CHAS. M. HAYS, *President.*CHAS. PERCY, *Sec. and Treas.*

Subscribed and sworn to before me this 1st day of April, A. D., 1897.

[L. S.]

MENDELL U. ANDERSON,  
U. S. Consul General at Montreal.

ANNUAL REPORT  
OF THE  
ST. JOSEPH VALLEY RAILWAY COMPANY,

*For the year ending December 31, 1896.*

[Filed June 18, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, A. A. PATTERSON, JR., Chicago, Ill.  
*Vice President*, D. H. PATTERSON, Chicago, Ill.  
*Secretary*, F. McOMBER, Berrien Springs, Mich.  
*Treasurer*, F. L. REEVES, Berrien Springs, Mich.  
*General Manager*, A. A. PATTERSON, JR., Chicago, Ill.  
*Chief Engineer*, E. C. HURD, Benton Harbor, Mich.  
*Attorney*, M. L. HOWELL, Cassopolis, Mich.

DIRECTORS.

A. A. PATTERSON, JR., Chicago, Ill.  
D. H. PATTERSON, Chicago, Ill.  
F. McOMBER, Berrien Springs, Mich.  
F. L. REEVES, Newark, N. J.  
J. A. PATTERSON, Albany, N. Y.  
F. B. BENTON, Chicago, Ill.  
Terms expire when new board is elected.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: August 1, 1889.  
Number of stockholders at date of last election: 7.  
Number of stockholders in Michigan at same date: 2.  
Amount of full paid stock held in Michigan at same date: \$400.00.  
Date of annual meeting of stockholders: First Tuesday in April.  
Fiscal year of company ends December 31.  
General offices of the company are located at Benton Harbor, Mich.

REMARKS.

The road is now in control of a construction company, for the purpose of rebuilding and extending, and was not in operation during the year 1896—the term for which this report is called.  
Five miles of heavy new grade and track have been completed from Benton Harbor south, and grading is now under way to complete the road to Berrien Springs.

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association .....		\$300,000 00
Par value of shares .....	\$100.00	
Number of shares issued .....	3,000	
Amount paid in on common .....	\$300,000 00	
Total amount paid in as per books of the company .....		\$00,000 00
Paid in per mile of road owned by company .....		\$0,000 00



## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage bonds, Aug, 1889.....	5%	Aug. 1, 1919.....	New York.....	\$50,000 00

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated.	Amount.
For construction.....		\$62,546 49
For equipment.....		
For real estate.....		
For renewals.....		
For miscellaneous.....		
For current balances....		

## RECAPITULATION.

Total funded debt.....	\$50,000 00
Total unfunded debt.....	62,546 49
Total debt liabilities.....	\$112,546 49
Amount of debt liabilities per mile of road, 10 miles and 6 miles additional graded.....	11,254 64
Total amount of stock and debt.....	412,546 49
Stock and debt per mile of road, 10 miles and 6 miles additional graded.....	41,254 64

## GENERAL BALANCE SHEET.—Dr.

Cost of road franchises, etc. ....	\$350,000 00	
Extension of line .....	15,989 42	
		\$365,989 42
Cash items:		
Cash .....	}	799 71
Bills receivable .....		
Debit balances from companies and individuals:		
Suspense account .....		45,757 86
Total .....		\$412,546 49

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$300,000 00
Funded debt.....	50,000 00
	\$350,000 00
Unfunded debt:	
Coupons.....	\$17,500 00
Notes payable.....	13,464 79
Vouchers and accounts.....	31,581 70
	62,546 49
Total.....	\$412,546 49

## COST OF ROAD AND EQUIPMENT.

*Purchased by present company.*

When purchased: August 1, 1889.	
Original cost to present company, of road and equipment.....	\$350,000 00
Amount expended since purchase, account of construction.....	15,989 42
Amount expended since purchase, account of miscellaneous.....	46,557 07
Total cost to date of report.....	\$412,546 49
Average cost per mile of road (not including sidings) 10 miles.....	41,254 64

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini.  
From Buchanan, Mich., to Berrien Springs, Mich., August 1, 1893.

## MAIN LINE.

	Miles.
In Michigan, from Buchanan to Berrien Springs.....	10
Total length completed.....	10
Total length of road belonging to this company in Michigan.....	10
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated.....	.50
Aggregate length of tracks in Michigan belonging to this company, computed as single track.....	10.50

Gauge of track, 4 feet 8½ inches.

## Number of bridges and trestles in Michigan.

	Number.	Aggregate length, feet.
Wooden trestles.....	11	1,529.8

Number of crossings of highways at grade in this State..... 10

Are your frogs and guard rails blocked as required by Act No. 174, Session Laws of 1888?

Yes.

How are they treated?

Plank blocking.

## Stations.

Number of stations on whole lines.....	4
Same in Michigan.....	4

## Employees.

Number of persons regularly employed on all roads operated by company, including officials.....	16
Same in Michigan.....	16
Classify your employees as per following list:	Number.
Brakemen.....	1
Conductors.....	1
Engineers.....	1
Firemen.....	1
Laborers.....	6
Yardmen.....	1

## REPAIRS AND RENOVATIONS.

## Fencing in Michigan.

How many miles of fencing have you.....	20
-----------------------------------------	----

## Road bed and track.

Number of track sections in Michigan.....	1
Average lengths of sections (miles).....	10
Average number of men in each section gang.....	6

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of 20 to 30 tons weight, exclusive of tender.....	1	.....
Number of platform cars.....	1	.....
Number of locomotives equipped with power brakes.....	1	.....

## ADDITIONAL QUESTIONS.

## Express companies.

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express company?

(When in operation)—American Express Co., 15c per 100 lbs. \$25.00 per month for messenger. Take freights at depot.

STATE OF MICHIGAN, } ss.  
COUNTY OF BERRIEN, }

A. A. Patterson, Jr., president, and D. H. Patterson, vice president, of the St. Joseph Valley Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF E. R.]

Signed,

A. A. PATTERSON, JR., *President.*

D. H. PATTERSON, *Vice President.*

Subscribed and sworn to before me this 17th day of June, A. D. 1897.

[L. S.]

SAMUEL H. KELLEY.

*Notary Public, Berrien Co., Mich.*

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini.  
From Buchanan, Mich., to Berrien Springs, Mich., August 1, 1893.

## MAIN LINE.

	Miles.
In Michigan, from Buchanan to Berrien Springs.....	10
Total length completed.....	10
Total length of road belonging to this company in Michigan.....	10
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated....	.50
Aggregate length of tracks in Michigan belonging to this company, computed as single track.....	10.50

Gauge of track, 4 feet 8½ inches.

## Number of bridges and trestles in Michigan.

	Number.	Aggregate length, feet.
Wooden trestles .....	11	1,529.8

Number of crossings of highways at grade in this State..... 10

Are your frogs and guard rails blocked as required by Act No. 174, Session Laws of 1883?

Yes.

How are they treated?

Plank blocking.

## Stations.

Number of stations on whole lines.....	4
Same in Michigan.....	4

## Employees.

Number of persons regularly employed on all roads operated by company, including officials.....	16
Same in Michigan.....	16
Classify your employees as per following list:	Number.
Brakemen.....	1
Conductors.....	1
Engineers.....	1
Firemen.....	1
Laborers.....	6
Yardmen.....	1

## REPAIRS AND RENEWALS.

## Fencing in Michigan.

How many miles of fencing have you.....	20
-----------------------------------------	----

## Road bed and track.

Number of track sections in Michigan.....	1
Average lengths of sections (miles).....	10
Average number of men in each section gang.....	6

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of 20 to 30 tons weight, exclusive of tender.....	1	
Number of platform cars.....		1
Number of locomotives equipped with power brakes.....		1

## ADDITIONAL QUESTIONS.

## Express companies.

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express company?

(When in operation)—American Express Co., 15c per 100 lbs. \$25.00 per month for messenger. Take freights at depot.

STATE OF MICHIGAN, } ss.  
COUNTY OF BERRIEN,

A. A. Patterson, Jr., president, and D. H. Patterson, vice president, of the St. Joseph Valley Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

A. A. PATTERSON, JR., *President.*

D. H. PATTERSON, *Vice President.*

Subscribed and sworn to before me this 17th day of June, A. D. 1897.

[L. S.]

SAMUEL H. KELLEY.

*Notary Public, Berrien Co., Mich.*

ANNUAL REPORT  
OF THE  
SUPERIOR TERMINAL RAILWAY COMPANY,

*For the year ending December 31, 1896.*

[Filed April 19, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President, G. W. R. MATTESON, Providence, R. I.  
Vice President, C. H. HALL, Ishpeming, Mich.  
Secretary, W. B. BOSSON, Boston, Mass.  
Treasurer, W. D. REES, Cleveland, O.*

DIRECTORS.

G. W. R. MATTESON, Providence, R. I.  
W. D. REES, Cleveland, Ohio.  
C. H. MOSS, Ishpeming, Mich.  
C. H. HALL, Ishpeming, Mich.  
W. H. JOHNSTON, Ishpeming, Mich.  
Terms expire February 8, 1898.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: January 27, 1893.  
Number of stockholders at date of last election: 10.  
Number of stockholder in Michigan at same date: 7.  
Amount of full paid stock held in Michigan at same date: None full paid in Michigan.  
Date of annual meeting of stockholders: Second Tuesday in February.  
Fiscal year of company ends: None yet established.  
General offices of the company are located at Ishpeming, Mich.

REMARKS.

This road is an incorporation of the mine tracks of Lake Superior Iron Co. and is now operated under an agreement with the D., S. S. & A. E'y Co. by which the tracks are included in the mileage of the D., S. S. & A. E'y Co., and its earnings are taxable against that company.

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$65,000 00
Par value of shares.....	\$100 00	
Number of shares issued.....	610	
Amount paid in on preferred.....		\$61,000 00
Amount paid in on shares not issued (number, 40), or 40 shares not issued.....		200 00
Total amount paid in, as per books of the company.....		61,200 00

## DESCRIPTION OF ROAD.

This road was built from time to time at various periods covering a term of about 30 years, by the Lake Superior Iron Company, to facilitate shipments of its product.

Its tracks are terminal tracks at the mines of the Lake Superior Company, and, as stated above, is now operated under an agreement with the D., S. S. & Atlantic R'y Co.

Gauge of track, 4 feet 8½ inches.

STATE OF RHODE ISLAND, } ss.  
COUNTY OF PROVIDENCE, }

Geo. W. R. Matteson, president, and Wm. B. Bosson, secretary of the Superior Terminal Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

Signed,

[L. S. OF R. R.]

G. W. R. MATTESON, *President.*

WM. B. BOSSON, *Secretary.*

Subscribed and sworn to before me this 13th day of April, A. D. 1897.

[L. S.]

FLETCHER S. MASON,  
*Notary Public.*

ANNUAL REPORT  
OF THE  
TOLEDO, SAGINAW & MUSKEGON RAILWAY COMPANY,

*For the year ending December 31, 1896.*

[Filed March 27, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President and General Manager*, CHARLES M. HAYS, Montreal, Province of Quebec.  
*Secretary and Treasurer*, JAMES H. MUIR, Detroit, Mich.  
*General Superintendent*, F. H. McGUIGAN, Montreal, Province of Quebec.  
*Superintendent*, A. B. ATWATER, Detroit, Mich.  
*Superintendent of Motive Power*, F. W. MORSE, Montreal, Province of Quebec.  
*Superintendent of Car Department*, W. McWOOD, Montreal, Province of Quebec.  
*Master Mechanic*, HERBERT ROBERTS, Fort Gratiot, Michigan.  
*Master Car Builder*, THOMAS SUTHERLAND, Fort Gratiot, Michigan.  
*Chief Engineer*, JOSEPH HOBSON, Montreal, Province of Quebec.  
*Assistant Engineer*, GEORGE MASSON, Detroit, Michigan.  
*General Traffic Manager*, GEORGE B. REEVE, Montreal, Province of Quebec.  
*General Passenger and Ticket Agent*, W. E. DAVIS, Montreal, Province of Quebec.  
*Assistant Passenger and Ticket Agent*, E. H. HUGHES, Chicago, Illinois.  
*General Freight Agent*, JOHN W. LOUD, Montreal, Province of Quebec.  
*First Assistant Freight Agent*, DAVID BROWN, Chicago, Illinois.  
*Solicitor*, E. W. MEDDAUGH, Detroit, Michigan.

DIRECTORS.

CHARLES M. HAYS, Montreal, Province of Quebec.  
 A. B. ATWATER, Detroit, Michigan.  
 C. JESSE CHURCH, Greenville, Michigan.  
 LYMAN G. MASON, Muskegon, Michigan.  
 E. W. MEDDAUGH, Detroit, Michigan.  
 E. MIDDLETON, Greenville, Michigan.  
 GEORGE B. REEVE, Montreal, Province of Quebec.

Terms expire 18th April, 1897, or when successors are elected.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered, or articles of association filed: 25th January, 1896.

Number of stockholders at date of last election: 9.

Number of stockholders in Michigan at same date: 5.

Amount of full paid stock held in Michigan at same date: \$500.

Date of annual meeting of stockholders: The second day after the second Wednesday in April.

Fiscal year of company ends December 31.

General offices of the company are located at Detroit, Mich.



TOLEDO, SAGINAW & MUSKEGON RAILWAY COMPANY. 493

GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$94,746 91
Total expenses, including taxes .....	\$182,446 88	
Net deficit .....	\$87,699 97	
Interest on funded debt.....	82,450 00	
Balance for the year.....	\$120,149 97	
Balance, loss from 31st December, 1895.....	256,666 18	
Items not included in above as follows:		
Advanced by the Grand Trunk Railway Company of Canada, and the Chi-		34,459 82
cago & Grand Trunk Railway Company under traffic agreement .....		342,856 38
Balance forwarded to next year .....	\$376,816 15	\$376,816 15

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association .....		\$2,800,000 00
Par value of shares .....	\$100 00	
Number of shares issued .....	16,000	
Amount paid in on common .....	\$1,600,000 00	
Total amount paid in, as per books of the company.....		1,600,000 00
Paid in per mile of road owned by company, 96 miles.....		16,666 67

ANALYSIS OF DEBT ACCOUNTS.

FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage bonds, dated July 2, 1888.....	5%	July 1, 1918.....	New York City ..	\$1,649,000 00

UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For miscellaneous.....		\$691,008 54

RECAPITULATION.

Total funded debt .....	\$1,649,000 00
Total unfunded debt .....	691,008 54
Total debt liabilities.....	\$2,340,008 54
Amount of debt liabilities per mile of road, 96 miles .....	24,375 04
Total amount of stock and debt .....	3,940,003 54
Stock and debt per mile of road [96 miles].....	41,041 70

GENERAL BALANCE SHEET.—Dr.

Construction and equipment account.....	\$3,249,365 50
Cash items:	
Cash .....	\$329 00
Due from agents.....	2,718 91
	3,047 91
Other assets:	
Debit balances from companies and individuals.....	\$22,028 47
Grand Trunk Railway Company, of Canada, for interest coupons pledged	
as security for advances under traffic agreement, per contra .....	219,591 38
Chicago & Grand Trunk Railway Company, under traffic agreement.....	108,618 95
	328,210 33
Loss or income account.....	342,856 38
Total .....	\$3,940,003 54

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$1,600,000 00	
Funded debt.....	1,649,000 00	
		\$3,249,000 00
Unfunded debt:		
Interest unpaid.....	\$286,204 98	
Vouchers and accounts.....	81,588 28	
Other liabilities:		
Grand Trunk Railway Company, of Canada, for advances under traffic agreement.....	219,591 38	
Chicago & Grand Trunk Railway Company, for advances under traffic agreement.....	108,618 95	
		691,008 54
Total.....		\$3,940,008 54

## COST OF ROAD AND EQUIPMENT.

## PURCHASED BY PRESENT COMPANY.

When purchased: August 1, 1888.

Original cost to present company, of road and equipment.....	\$3,180,000 00
Amount expended since purchase, account of construction.....	86,695 50
Amount expended since purchase, account of equipment.....	2,670 00
Total cost to date of report.....	3,249,365 50
Average cost per mile of road (not including sidings) 96 miles.....	33,847 56
Proportion of cost for Michigan.....	3,249,365 50

## ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

Main line and branches:		
Local fares.....	\$17,408 79	
Through fares.....	950 44	
Total passenger fares.....	\$18,359 23	
Express and baggage.....	902 00	
Mails.....	7,274 01	
Other sources.....	87 30	
Total passenger department earnings.....		\$26,572 54
Per train mile.....	80 86	
Per mile of road.....	227 12	

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic.....	\$49,530 88	
Through traffic.....	11,968 12	
Total traffic.....	\$61,549 00	
Total freight department earnings.....		61,549 00
Per train mile.....	90 84	
Per mile of road.....	528 06	
Total transportation earnings, entire line.....		\$86,121 54
Transportation earnings per mile of road.....	\$753 18	
Transportation earnings per train mile.....	60	
Miscellaneous receipts from operating account, other than for transportation, as follows:		
From rents of tracks, yards and terminals.....	6,625 37	
Total.....	\$6,625 37	
Total earnings from operation of road.....		94,746 91
Total earnings per mile of road.....	809 80	
Total earnings per train mile.....	64	
Total taxable earnings per mile of road in Michigan.....	809 80	
Total income from all sources.....		94,746 91

# TOLEDO, SAGINAW & MUSKEGON RAILWAY COMPANY. 495

## ANALYSIS OF EXPENSES.

### MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway.....	\$19,375 34
Renewals of rails.....	750 00
Renewals of ties.....	11,374 20
Repairs and renewals of bridges and culverts.....	10,974 06
Repairs and renewals of fences, road crossings, signs and cattle guards.....	3,774 50
Repairs and renewals of buildings and fixtures.....	2,227 73
Repairs and renewals of docks and wharves.....	135 80
Stationery and printing.....	82 24
<b>Total.....</b>	<b>\$48,693 87</b>

### MAINTENANCE OF EQUIPMENT.

Superintendence.....	\$343 04
Repairs and renewals of locomotives.....	9,187 81
Repairs and renewals of passenger cars.....	1,802 75
Repairs and renewals of freight cars.....	4,575 67
Repairs and renewals of work cars.....	189 60
Repairs and renewals of shop machinery and tools.....	435 26
Stationery and printing.....	78 40
Other expenses.....	151 06
<b>Total.....</b>	<b>\$16,693 09</b>

### CONDUCTING TRANSPORTATION.

Superintendence.....	\$2,118 73
Engine and roundhouse men.....	10,968 95
Fuel for locomotives.....	10,062 73
Water supply for locomotives.....	667 67
Oil, tallow and waste for locomotives.....	527 02
Train service.....	7,153 50
Train supplies and expenses.....	1,549 15
Switchmen, flagmen and watchmen.....	2,822 70
Telegraph expenses.....	816 58
Station service.....	9,494 45
Station supplies.....	1,203 39
Car mileage—Balance.....	770 50
Loss and damage.....	193 53
Injuries to persons.....	65 87
Advertising.....	547 35
Outside agencies.....	821 31
Commissions.....	112 89
Rents for tracks, yards and terminals.....	10,575 25
Rent of buildings and other property.....	837 83
Stationery and printing.....	1,094 70
<b>Total.....</b>	<b>\$62,427 10</b>

### GENERAL EXPENSES.

Salaries of general officers.....	\$314 74
Salaries of clerks and attendants.....	884 85
General office expenses and supplies.....	107 95
Insurance.....	547 35
Law expenses.....	765 75
Stationery and printing (general offices).....	89 22
Taxes.....	1,972 96
<b>Total.....</b>	<b>\$4,632 82</b>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	36.76	\$48,693 87
Maintenance of equipment.....	12.60	16,693 09
Conducting transportation.....	47.13	62,427 10
General expenses, including taxes.....	3.51	4,632 82
<b>Total operating expenses and taxes.....</b>	<b>100.00</b>	<b>\$132,446 88</b>
Operating expenses and taxes per mile of road.....		\$1,182 02
Operating expenses and taxes per train mile run, for trains, earning revenue (147,243 miles).....		90
Proportion of operating expenses and taxes for Michigan, main line.....		132,446 88
<b>Total proportion of expenses for Michigan.....</b>		<b>132,446 88</b>
Percentage of expenses to earnings.....	139.79	
Net loss per mile of road.....	322 22	
Net loss per train mile.....	26	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Ashley, Mich., to Muskegon, Mich., August 1, 1888.

MAIN LINE.		Miles.	Miles.
In Michigan, from Ashley to Muskegon .....	96		
Total length completed .....			96
Total length of road belonging to this company .....			96
Total length of road belonging to this company in Michigan .....	96		
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated .....			10.07
Aggregate length of tracks in Michigan belonging to this company, computed as single track .....			106.07

Gauge of track, 4 feet 8½ inches.

## Number of bridges and trestles in Michigan.

	Number.	Aggregate length, feet.
Wooden bridges .....	4	375
Wooden trestles .....	70	6,837
Total .....	74	7,212

## Crossings.—Railroad and highway.

What railroads cross your road at grade in this State, and at what locality?

Detroit, Lansing & Northern R. R. at Sheridan and Greenville.  
Grand Rapids & Indiana R. R. at Cedar Springs and Muskegon.  
Chicago & West Michigan R'y at Sparta, Fruitport Junction and Muskegon.

At what crossings are interlocking and derailing switches in operation?

At Detroit, Lansing & Northern R. R. crossings at Sheridan and Greenville.  
At Grand Rapids & Indiana R. R. crossing at Cedar Springs.  
At Chicago & West Michigan R'y crossings at Sparta, Fruitport Junction and Muskegon.

What pattern or patterns have you adopted for use?

Wharton's.

Number of crossings of highways at grade in this State .....	125
Number of crossings of highways at grade in this State at which there are gates or flagmen .....	3
Number of crossings of highways over or under railroad: (over, 2; under, 2) .....	4
Number of highway bridges, 18 feet above track .....	2

Have safety guards been erected at overhead obstructions?

Yes.

Are your frogs and guard rails blocked as required by act 174, session laws 1883?

Yes.

How are they treated?

Plank blocking.

## Stations.

Number of stations on whole lines .....	26
Same in Michigan .....	26

## Employees.

Number of persons regularly employed on all roads operated by company, including officials .....	123
Same in Michigan .....	123

Classify your employes as per following list:

	Number.
Baggagemen .....	2
Brakemen .....	7
Conductors .....	4
Engineers .....	4
Fireman .....	5
Laborers .....	51
Shopmen .....	6
Yardmen .....	1
Others .....	43

# TOLEDO, SAGINAW & MUSKEGON RAILWAY COMPANY. 497

## REPAIRS AND RENEWALS.

### Fencing in Michigan.

How many miles of fencing have you? ..... 192

### Road bed and track.

Number of track sections in Michigan .....	12
Average lengths of sections (miles) .....	8
Average number of men in each section gang .....	4
Number of new ties put in whole line and sidings during the year .....	31,321
Number of new ties put in track and sidings in Michigan .....	31,321
Average number of new ties per mile of road and sidings .....	286

### Bridges and culverts.

Timber culverts replaced during the year—  
 With timber—number ..... 11

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender.....	6	\$28,000 00
Total.....	6	\$28,000 00
Number of passenger cars—8-wheel, including official cars .....	2	\$7,000 00
Number of express and baggage cars.....	4	8,800 00
Number of box freight cars.....	80	31,670 00
Number of platform cars.....	52	11,570 00
Number of conductors' way cars .....	2	2,800 00
Total.....	140	\$61,640 00
Number of locomotives equipped with power brakes .....	6	
Number of passenger-train cars equipped with power brakes.....	6	

What patterns of power brakes have you in use, and number of locomotives and cars with each?  
 6 locomotives with Westinghouse air brakes; 6 cars with Westinghouse air brakes.

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?  
 Yes.

What pattern or patterns have you adopted for use?  
 Gould and Janney.

How are your passenger cars heated?  
 Baker heater (hot water).

## MILEAGE, TRAFFIC, ETC.

### Train Mileage.

	All in Michigan.
Miles run by passenger trains during the year .....	56,434
Miles run by freight trains during the year.....	176
Miles run by mixed trains.....	90,633
Total mileage of trains earning revenue .....	147,243

### Passenger traffic.—Road all in State of Michigan.

	Numbers.	Miles.	Rate.
Number of through passengers carried earning revenue.....	349		
Number of local passengers carried earning revenue.....	31,231		
Total number of passengers carried earning revenue.....	31,580		
Number of passengers carried one mile.....	726,387		
Average distance carried.....		23.0	
Average amount received from each passenger .....			\$0 58.14
Average receipts per mile for through passengers.....			02.38
Average receipts per mile for local passengers.....			02.54
Average receipts per passenger per mile for all passengers.....			02.53

*Freight traffic.—Road all in State of Michigan.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	11,511		
Number of tons of local freight carried, earning revenue.....	68,598		
Total tons of freight carried, earning revenue.....	80,109		
Total mileage of through freight.....		1,321,554	
Total mileage of local freight.....		2,812,158	
Total freight mileage or tons carried one mile.....		4,133,712	
Average ton haul for through freight.....		115.0	
Average ton haul for local freight.....		41.0	
Average ton haul for all freight.....		51.6	
Average amount received for each ton haul.....			\$0 76.83
Average receipts ton per mile, for through freight.....			00.91
Average receipts ton per mile, for local freight.....			01.76
Average receipts ton per mile, for all freight.....			01.49

## FREIGHT TRAFFIC MOVEMENT.—ROAD ALL IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	10,485	217	10,702	13.36
Flour.....	2,088	304	2,392	2.99
Other mill products.....	114	10	124	.15
Hay.....	1,835	20	1,855	2.32
Tobacco.....		55	55	.07
Fruit and vegetables.....	15,488	244	15,742	19.65
Potatoes.....	3,845		3,845	4.80
<b>Products of animals:</b>				
Live stock.....	2,703	31	2,734	3.41
Dressed meats.....	11	2	13	.02
Other packing house products.....	129	30	159	.20
Poultry, game and fish.....	15	3	18	.02
Wool.....	55	46	101	.13
Hides and leather.....	26	2	28	.03
<b>Products of mines:</b>				
Anthracite coal.....	107	1,107	1,214	1.52
Bituminous coal.....		1,318	1,318	1.65
Coke.....		70	70	.09
Stone, sand, and other like articles.....	6,027	111	6,138	7.66
Salt.....		328	328	.41
<b>Products of forest:</b>				
Lumber.....	8,925	1,359	10,284	12.84
Logs.....	5,972	31	6,003	7.50
<b>Manufactures:</b>				
Petroleum and other oils.....		223	223	.28
Sugar.....	25	718	743	.93
Iron, pig and bloom.....	74		74	.09
Iron and steel rails.....		41	41	.05
Other castings and machinery.....	99	636	735	.91
Cement, brick and lime.....	1,081	1,178	2,204	2.75
Agricultural implements.....	12	190	202	.25
Wagons, carriages, tools, etc.....		72	72	.09
Wines, liquors and beers.....	591	91	682	.85
Household goods and furniture.....	1,723	139	1,862	2.32
<b>Merchandise.....</b>	<b>1,007</b>	<b>1,729</b>	<b>2,736</b>	<b>3.41</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	4,489	2,923	7,412	9.25
<b>Total tonnage.....</b>	<b>66,886</b>	<b>13,223</b>	<b>80,109</b>	<b>100</b>

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The National Express Company has exclusive right on passenger trains for carrying light freight, money, etc., taking freight to and from depots at the following rates: On through merchandise—first-class rates; on local merchandise, 1½ first-class rates, and on perishable goods, 1 1-10 first-class rates.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
96 miles owned by Western Union Telegraph Company.

*Fast freight lines.*

To what fast freight lines, or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

Name of company.	General office.	Amount paid.
American Refrigerator Transit Co.....	St. Louis, Mo.....	\$0 31
Armour Car Lines.....	Chicago, Ill.....	2 00
Arms' Palace Horse Car Co.....	Chicago, Ill.....	13
Burton Stock Car Co.....	Boston, Mass.....	88
Chicago, Boston & Liverpool Refrigerator Line.....	St. Albans, Vt.....	96 39
Chicago Refrigerator Car Co.....	Chicago, Ill.....	74 54
International Fruit Dealers' Despatch.....	Chicago, Ill.....	76
I. E. B. Furniture Line.....	Atlanta, Ga.....	25
Live Poultry Transportation Co.....	Chicago, Ill.....	28
Merchants' Despatch Transportation Co.....	New York, N. Y.....	21 52
National Despatch Line.....	St. Albans, Vt.....	240 51
New York Despatch Refrigerator Line.....	Boston, Mass.....	108 73
North & South Rolling Stock Co.....	St. Louis, Mo.....	81
Total .....		\$541 11

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

## KILLED.

May 25, 1896, W. H. Morehouse, trespasser, Greenville. Walking on track; no inquest.  
November 21, Claud Shank, brakeman, Bannister. Fell from train; no inquest.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Pas-sengers.	Employés.	Others.	Pas-sengers.	Employés.	Others.
Falling from trains.....		1				
Trespassers on tracks.....			1			
Total.....		1	1			

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year.....	2
Number of casualties purely accidental.....	1
Number resulting from lack of caution, carelessness or misconduct.....	1
Trespassers and tramps killed or injured.....	1

## MICHIGAN RAILROAD RETURNS, 1896.

## CLASSIFICATION OF EMPLOYÉS.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Brakemen .....	1	-----	1
Total .....	1	-----	1

STATE OF MICHIGAN, } ss.  
COUNTY OF WAYNE, }

Almon B. Atwater, superintendent, and James H. Muir, secretary and treasurer, of the Toledo, Saginaw & Muskegon Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

A. B. ATWATER,  
JAMES H. MUIR,

Subscribed and sworn to before me this 28th day of March, A. D. 1897.

[L. S.]

LAWRENCE F. LANG,

*Notary Public, County of Wayne, State of Michigan.*



ANNUAL REPORT  
OF THE  
WISCONSIN & MICHIGAN RAILWAY COMPANY,

*For the year ending December 31, 1896.*

[Filed April 10, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President, S. M. FISCHER, Chicago, Ill.*  
*Vice President, JNO. BAGLEY, Chicago, Ill.*  
*Secretary, J. N. FAITHORNE, Chicago, Ill.*  
*Auditor, O. A. KOSS, Chicago, Ill.*  
*Treasurer, S. M. FISCHER, Chicago, Ill.*  
*General Manager, J. M. FAITHORNE, Chicago, Ill.*  
*Superintendent, A. H. CROCKER, Peshtigo, Wis.*  
*Chief Engineer, A. M. KINSMAN, Menominee, Mich.*  
*Superintendent of Telegraph, S. M. HARRISON, Peshtigo, Wis.*  
*Traffic Manager, J. J. COLEMAN, Chicago, Ill.*

DIRECTORS.

*S. M. FISCHER, Chicago, Ill.*  
*J. N. FAITHORNE, Chicago, Ill.*  
*J. C. AMES, Chicago, Ill.*  
*JNO. BAGLEY, Chicago, Ill.*  
*J. J. COLEMAN, Chicago, Ill.*  
 Terms expire, July 18, 1898.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: October 26, 1893.  
 Number of stockholders at date of last election: 51.  
 Number of stockholders in Michigan at same date: 3.  
 Amount of full paid stock held in Michigan at same date: \$12,000.00.  
 Date of annual meeting of stockholders: Third Tuesday in January.  
 Fiscal year of company ends December 31.  
 General offices of the company are located at Chicago, Ill.

GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$109,021 06
Total expenses including taxes.....	\$86,147 28	
Net income.....		22,873 83
Interest on funded debt.....	\$49,025 00	
Balance for the year.....	\$26,151 17	
Balance (profit and loss) last year.....	8,358 18	
Balance forward to next year.....	\$34,509 35	

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$951,500 00
Par value of shares.....	\$100 00	
Number of shares issued.....	9,515	
Amount paid in on common.....		\$61,500 00
Total amount paid in, as per books of the company.....		\$61,500 00
Paid in per mile of road owned by company.....		14,972 46

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
First mortgage.....	5%	Jan. 1, 1945.....	Atlantic Trust Co., N. Y.....	\$951,000 00

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated.	Amount.
For equipment.....		\$180,170 38
For miscellaneous.....		94,350 00
For current balances.....		72,522 18
Total unfunded debt.....		\$347,042 56

## RECAPITULATION.

Total funded debt.....	\$951,000 00
Total unfunded debt.....	347,042 56
Total debt liabilities.....	\$1,298,042 56
Amount of debt liabilities per mile of road, 63.55 miles.....	20,425 53
Total amount of stock and debt.....	2,249,542 56
Stock and debt per mile of road, 63.55 miles.....	35,397 99

## GENERAL BALANCE SHEET.—Dr.

Construction account.....	\$1,902,000 00
Equipment account.....	235,080 00
Cash items:	
Cash.....	\$1,119 22
Due from agents.....	4,611 24
Other assets:	
Materials and supplies.....	\$1,998 33
Debit balances from companies and individuals.....	70,244 42
Total.....	\$2,215,033 21

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$951,500 00
Funded debt.....	951,000 00
Unfunded debt:	
Interest unpaid.....	\$59,850 00
Notes payable.....	214,670 38
Vouchers and accounts.....	25,602 14
Other liabilities.....	46,920 04
Profit and loss or income accounts.....	34,509 35
Total.....	\$2,215,033 21

## COST OF ROAD AND EQUIPMENT.

## PURCHASED BY PRESENT COMPANY.

When purchased: January 1, 1895.

Original cost to present company, of road and equipment .....	\$1,620,000 00
Amount expended since purchase, account of construction .....	282,000 00
Amount expended since purchase, account of equipment .....	122,560 00
<b>Total cost to date of report .....</b>	<b>\$2,024,560 00</b>
<b>Average cost per mile of road (not including sidings) 63.55 miles .....</b>	<b>31,826 28</b>
<b>Proportion of cost for Michigan .....</b>	<b>979,077 22</b>

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

<b>Main line:</b>	
Extensions and new sidings .....	\$240,000 00
New cars .....	122,560 00
<b>Total .....</b>	<b>\$362,560 00</b>
<b>Branches:</b>	
Extensions and new sidings .....	42,000 00
<b>Total .....</b>	<b>\$42,000 00</b>
<b>Total charges to property account as above .....</b>	<b>404,560 00</b>
<b>Net addition to property account .....</b>	<b>\$404,560 00</b>

## ANALYSIS OF EARNINGS.—IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

<b>Main line and branches:</b>	
Local fares .....	\$3,413 67
Through fares .....	421 35
<b>Total passenger fares .....</b>	<b>\$3,835 02</b>
Express and baggage .....	56 25
Mails .....	688 50
<b>Total passenger department earnings .....</b>	<b>\$4,579 77</b>
Per train mile .....	\$0 23
Per mile of road .....	143 13

## FREIGHT EARNINGS.

<b>Main line and branches:</b>	
Local traffic .....	17,533 74
Through traffic .....	8,636 02
<b>Total traffic .....</b>	<b>26,169 76</b>
Other sources, freight department .....	\$3,363 69
<b>Total freight department earnings .....</b>	<b>29,533 45</b>
Per train mile .....	\$1 31
Per mile of road .....	922 92

## ANALYSIS OF EARNINGS.—ENTIRE LINES.

## PASSENGER EARNINGS.

<b>Main line and branches:</b>	
Local fares .....	\$10,614 32
Through fares .....	1,311 88
<b>Total passenger fares .....</b>	<b>\$11,926 20</b>
Express and baggage .....	\$152 19
Mails .....	1,398 60
<b>Total passenger department earnings .....</b>	<b>13,476 99</b>
Per train mile .....	\$0 28
Per mile of road .....	186 99

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic .....	\$52,750 28	
Through traffic .....	35,166 85	
Total traffic .....		\$87,917 13
Other sources, freight department .....	\$7,626 94	
Total freight department earnings .....		95,544 07
Per train mile .....	\$1 87	
Per mile of road .....	1,325 62	
Total transportation earnings, entire line .....		\$106,021 06
Transportation earnings per mile of road .....	1,512 61	
Transportation earnings per train mile .....	1 00	
Total earnings from operation of road .....		\$34,113 22
Total earnings per mile of road .....	1,066 05	
Total earnings per train mile .....	80	
Proportion of taxable earnings for Michigan .....	34,113 22	
Total taxable earnings per mile of road in Michigan .....	1,066 05	
Total income from all sources .....		\$106,021 06
Proportion of income for Michigan .....		34,113 22

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway .....	\$15,409 54
Renewals of ties .....	61 58
Repairs and renewals of bridges and culverts .....	73 56
Repairs and renewals of fences, road crossings, signs and cattle guards .....	1 96
Repairs and renewals of buildings and fixtures .....	525 05
Repairs and renewals of telegraph .....	522 56
Total .....	\$16,594 26

## MAINTENANCE OF EQUIPMENT.

Superintendence .....	\$1,302 57
Repairs and renewals of locomotives .....	3,576 01
Repairs and renewals of passenger cars .....	584 55
Repairs and renewals of freight cars .....	3,862 61
Repairs and renewals of shop machinery and tools .....	947 78
Other expenses .....	12 43
Total .....	\$10,285 90

## CONDUCTING TRANSPORTATION.

Superintendence .....	\$917 88
Engine and roundhouse men .....	7,231 57
Fuel for locomotives .....	9,055 75
Water supply for locomotives .....	1,274 48
Oil, tallow and waste for locomotives .....	191 59
Other supplies for locomotives .....	91 84
Train service .....	6,345 40
Train supplies and expenses .....	314 75
Telegraph expenses .....	1,406 04
Station service .....	3,917 86
Station supplies .....	216 06
Switching charges—balance .....	3,168 66
Loss and damage .....	555 99
Injuries to persons .....	1,832 00
Clearing wrecks .....	46 02
Advertising .....	51 75
Outside agencies .....	322 50
Commissions .....	162 43
Rents for tracks yards and terminals .....	7,371 52
Rent of buildings and other property .....	911 65
Stationery and printing .....	698 42
Other expenses .....	77 65
Total .....	\$46,161 81

## GENERAL EXPENSES.

Salaries of general officers.....	\$4,945 35
Salaries of clerks and attendants.....	3,237 88
General office expenses and supplies.....	718 40
Insurance.....	895 54
Law expenses.....	587 60
Stationery and printing (general offices).....	1,007 49
Other expenses.....	1,302 37
{ Interest and discount.....	750 04
{ Miscellaneous.....	160 60
Taxes.....	
Total.....	\$13,105 27

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	19	\$16,594 25
Maintenance of equipment.....	12	10,285 90
Conducting transportation.....	54	46,161 81
General expenses, including taxes.....	15	13,105 27
Total operating expenses and taxes.....	100	\$86,147 23
Operating expenses and taxes per mile of road.....		\$1,195 23
Operating expenses and taxes per train mile run for trains earning revenue, 48,290 passenger miles; 51,114 freight miles.....	86	

## PROPORTION OF OPERATING EXPENSES AND TAXES FOR MICHIGAN.

Main line.....	\$26,705 64
Total proportion of expenses for Michigan.....	\$26,705 64
Percentage of expenses to earnings.....	.79
Net earnings per mile of road.....	\$317 50
Net earnings per train mile.....	23

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
 From Peshtigo, Wis., to Faithorn Junction, Mich., January 1, 1895.  
 From Fisher, Mich., to Ingalls, January 1st, 1895.  
 From Peshtigo Harbor, Wis., to Peshtigo, Wis., September 1, 1896.

## MAIN LINE.

	Miles.	Miles.
In Michigan, from State Line to Faithorn Junction.....	22 28	
In Wisconsin, from Peshtigo Harbor to State Line.....	32 82	
Total length completed.....		57 10

## BRANCHES.

Ingalls, from Fisher to Ingalls, Mich.....	5.00	
Hammond, from Hammond to end.....	1.45	
Total length of branches owned by company.....		6.45
Total length of branches owned by company in Michigan.....	6.45	
Total length of road belonging to this company.....		63.55
Total length of road belonging to this company in Michigan.....	30.73	
Aggregate length in Michigan of sidings, spurs and other tracks not above enumerated.....	3.55	
Aggregate length of tracks in Michigan belonging to this company, computed as single track.....		34.28

Gauge of track, 4 feet 8½ inches.

## MICHIGAN RAILROAD RETURNS, 1896.

*Proprietary or leased roads operated by this company.*

Name, description and length of each:	Total miles. In Michigan.	
C. M. & St. P. R'y, between Bagley Junction, Wis., and Menominee, Mich...	8.52	1.23
Total .....	8.52	1.23
Total miles operated by the company .....	72.075	31.950

If north of parallel 44 of latitude:  
Yes.

Give date road commenced to be built:  
April 1894.

Give date road completed:  
Dec. 31, 1895.

Give date road commenced to be operated:  
January 1, 1895.

Where built from and to:  
Peshtigo, Wis., to Faithorn Junction, Mich.

Give exact number of miles.  
54.1.

<i>Number of bridges and trestles in Michigan.</i>		Number.	Aggregate length, feet.
Iron bridges, $\frac{1}{2}$ in Michigan .....		1	385
Wooden trestles .....		6	303
Total .....		7	688

*Crossings.—Railroad and highway.*

Number of crossings of highways at grade in this State .....

Are your frogs and guard rails blocked as required by act 174, session laws 1883?  
Yes.

How are they treated?  
Blocked with plank.

*Stations.*

Number of stations on whole lines .....

Same in Michigan .....

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials .....

Same in Michigan .....

Classify your employ  s as per following list:

	Number.
Baggagemen .....	1
Brakemen .....	8
Conductors .....	4
Engineers .....	5
Firemen .....	5
Laborers .....	44
Shopmen .....	21

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

Give the number of miles required to complete fence both sides of your track in Michigan .....

*Road bed and track.*

Number of track sections in Michigan .....

Average lengths of sections, miles .....

Average number of men in each section gang .....

Number of new ties put in whole line during the year .....

Number of new ties put in track in Michigan .....

Average number of new ties per mile of road .....

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender.....	3	\$15,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender.....	2	8,000 00
Number of locomotives of 10 to 20 tons weight, exclusive of tender.....	2	8,000 00
<b>Total</b> .....	<b>7</b>	<b>\$31,000 00</b>
Number of passenger cars—12-wheel, including official cars.....	2	\$6,000 00
Number of box freight cars.....	489	199,825 00
Number of platform cars.....	110	88,500 00
Number of conductors' way cars.....	2	1,500 00
Other cars.....	4	1,200 00
<b>Total</b> .....	<b>587</b>	<b>\$277,525 00</b>
Number of locomotives equipped with power brakes.....		5
Number of passenger train cars equipped with power brakes.....		2
Number of freight cars equipped with power brakes.....		10

What patterns of power brakes have you in use, and number of locomotives and cars with each?..... 16

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?

Yes.

What pattern or patterns have you adopted for use?  
Chicago and Ludlow.

How are your passenger cars heated?  
Coal stoves.

## MILEAGE, TRAFFIC, ETC.

## Train mileage.

	Entire lines.	In Michigan.
Miles run by passenger trains during the year.....	48,290	21,407
Miles run by freight trains during the year.....	51,114	22,859
<b>Total mileage of trains earning revenue</b> .....	<b>99,404</b>	<b>44,066</b>

## Passenger traffic.—Entire lines.

	Numbers.	Miles.	Rate.
Number of through passengers carried, earning revenue.....	1,402	48,054	\$0 02.78
Number of local passengers carried, earning revenue.....	20,228	341,296	03.11
<b>Total number of passengers carried, earning revenue</b> .....	<b>21,630</b>		
Number of passengers carried one mile.....	389,350		
Average distance carried.....		18	
Average amount received from each passenger.....			55
Average receipts per mile for through passengers.....			02.78
Average receipts per mile for local passengers.....			03.11
Average receipts per passenger per mile for all passengers.....			03.06
Estimated cost of carrying each passenger one mile.....			01.89

## Passenger traffic.—In State of Michigan.

Number of through passengers carried, earning revenue.....	1,037	35,548	\$0 02.78
Number of local passengers carried, earning revenue.....	13,089	148,090	02.30
<b>Total number of passengers carried, earning revenue</b> .....	<b>14,126</b>		
Number of passengers carried one mile.....	183,638		
Average distance carried.....		13	
Average amount received from each passenger.....			27
Average receipts per mile for through passengers.....			02.78
Average receipts per mile for local passengers.....			02.30
Average receipts per passenger per mile for all passengers.....			02.09
Estimated cost of carrying each passenger one mile.....			01.89

## MICHIGAN RAILROAD RETURNS, 1896.

<i>Freight traffic.—Entire lines.</i>			
	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	53,971		
Number of tons of local freight carried, earning revenue.....	65,474		
Total tons of freight carried earning revenue.....	119,445		
Total mileage of through freight.....		1,786,440	
Total mileage of local freight.....		1,386,918	
Total freight mileage or tons carried one mile.....		3,173,358	
Average ton haul for through freight.....		33.10	
Average ton haul for local freight.....		21.03	
Average ton haul for all freight.....		26.58	
Average amount received for each ton haul.....			\$0 74
Average receipts ton per mile for through freight.....			0.19
Average ton receipts per mile, for local freight.....			0.33
Average receipts ton per mile for all freight.....			0.28

<i>Freight traffic.—In State of Michigan.</i>			
Number of tons of through freight carried, earning revenue.....	24,100		
Number of tons of local freight carried, earning revenue.....	41,348		
Total tons of freight carried, earning revenue.....	65,448		
Total mileage of through freight.....		368,971	
Total mileage of local freight.....		389,085	
Total freight mileage or tons carried one mile.....		758,056	
Average ton haul for through freight.....		15.31	
Average ton haul for local freight.....		9.41	
Average ton haul for all freight.....		11.58	
Average amount received for each ton haul.....			\$0 40
Average receipts ton per mile, for through freight.....			0.23
Average receipts ton per mile for local freight.....			0.43
Average receipts ton per mile, for all freight.....			0.34



## FREIGHT TRAFFIC MOVEMENT.—ENTIRE LINES.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	37	8,990	9,027	7.08
Flour.....	31	808	834	.65
Other mill products.....	90	962	1,052	.82
Hay.....	180	230	410	.32
<b>Products of animals:</b>				
Live stock.....		18	18	.14
Dressed meats.....		80	80	
Other packing house products.....		17	17	
Poultry, game and fish.....	22		22	
Wool.....		58	58	
<b>Products of mines:</b>				
Bituminous coal.....		5,264	5,264	4.10
Stone, sand, and other like articles.....	9,884		9,884	7.70
<b>Products of forest:</b>				
Lumber.....	9,890	3,297	13,187	10.27
Logs.....	45,100	45	45,145	35.16
Shingles.....	29,300	437	29,737	23.16
<b>Manufactures:</b>				
Sugar.....		1,104	1,104	.86
Iron, pig and bloom.....	25	231	256	.19
Iron and steel rails.....	138	170	308	.24
Other castings and machinery.....	112	80	192	.15
Cement, brick and lime.....	82	739	821	.64
Wines, liquors and beers.....			89	.07
Household goods and furniture.....	69	20		
<b>Merchandise</b> .....	7,057	826	7,883	6.14
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	2,014	1,007	3,021	2.36
<b>Total tonnage</b> .....	104,081	24,378	128,409	100

## MICHIGAN RAILROAD RETURNS, 1896.

## FREIGHT TRAFFIC MOVEMENT.—IN STATE OF MICHIGAN.

Company's material excluded.

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
Products of agriculture:				
Grain.....	93	8,202	8,295	9.30
Flour.....		603	603	.67
Other mill products.....		837	837	.93
Hay.....	84	312	396	.44
Products of animals:				
Live stock.....	17	15	32	} .15
Dressed meats.....		72	72	
Other packing house products.....		29	29	
Products of mines:				
Stone, sand, and other like articles.....	150		150	.17
Products of forest:				
Lumber.....	5,974	5,987	11,961	13.41
Logs.....	33,900	156	34,056	38.18
Shingles.....	22,630	329	22,960	25.74
Manufactures:				
Sugar.....		1,106	1,106	1.24
Iron, pig and bloom.....	30	210	240	.27
Castings and machinery.....		356	356	.40
Cement, brick and lime.....		318	360	.42
Merchandise.....	4,770	1,046	5,816	6.52
Miscellaneous:				
Other commodities not mentioned above.....	1,926		1,926	2.16
Total tonnage.....	69,617	19,578	89,195	100

## ADDITIONAL QUESTIONS.

## Express companies.

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Co. Local merchandise, 1½ times first class rates; through merchandise, 1 1-10 times first class rates; beer, etc., second class rates. Take freights at depots.

## Telegraph.

Number of miles of telegraph on your road, and to whom does it belong?  
72 miles. Western Union Telegraph Co.

STATE OF ILLINOIS, } ss.  
COUNTY OF COOK,

S. M. Fischer, president and treasurer, of the Wisconsin & Michigan Railway Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declares them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of his knowledge and belief.

[L. S. OF E. R.]

Signed,

S. M. FISCHER.

Subscribed and sworn to before me this 8th day of July, A. D. 1897.

[L. S.]

ROBERTA M. SHAW,  
Notary Public.

ANNUAL REPORT  
OF THE  
WABASH RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed March 22, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, O. D. ASHLEY, New York, N. Y.

*Vice Presidents:*

EDGAR T. WELLES, New York, N. Y.

J. RAMSEY, JR., St. Louis, Mo.

*Secretary*, J. C. OTTESON, New York, N. Y.

*Auditor*, D. B. HOWARD, St. Louis, Mo.

*Treasurer*, F. L. O'LEARY, St. Louis, Mo.

*General Manager*, J. RAMSEY, JR., St. Louis, Mo.

*General Superintendent*, H. L. MAGEE, St. Louis, Mo.

*Division Superintendents:*

E. A. GOULD, Peru, Ind.

J. L. GOODRICH, Chicago, Ill.

W. A. GARRETT, Moberly, Mo.

*Chief Engineer*, W. S. LINCOLN, St. Louis, Mo.

*Superintendent of Telegraph*, G. C. KINSMAN, Decatur, Ill.

*General Passenger Agent*, C. S. CRANE, St. Louis, Mo.

*General Freight Agent*, S. B. KNIGHT, St. Louis, Mo.

*Attorney*, WELLS H. BLODGETT, St. Louis, Mo.

DIRECTORS.

O. D. ASHLEY, New York, N. Y.

GEO. J. GOULD, New York, N. Y.

EDGAR T. WELLES, New York, N. Y.

HENRY K. MCHARG, New York, N. Y.

C. J. LAWRENCE, New York, N. Y.

P. B. WICKOFF, New York, N. Y.

S. C. REYNOLDS, Toledo, Ohio.

EDWIN GOULD, New York, N. Y.

THOS. H. HUBBARD, New York, N. Y.

JOHN T. TERRY, New York, N. Y.

RUSSELL SAGE, New York, N. Y.

C. C. MACRAE, London, Eng.

FRANCIS PAVY, London, Eng.

Terms expire second Tuesday in September, 1897.

## STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: July 31, 1889.  
 Date of annual meeting of stockholders: Second Tuesday in September.  
 Fiscal year of company ends: June 30.  
 General offices of the company are located at St. Louis, Mo.

## GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$12,158,123 95
Total expenses, including taxes.....	\$9,571,434 80	
Net income .....		\$2,586,689 15
Interest on funded debt.....	\$2,694,545 00	
Dividend on debenture bonds.....	35,000 00	
Sundries .....	57,700 39	
Balance, deficit.....	\$200,554 24	2,787,245 39
Balance for the year, deficit .....	\$200,554 24	
Balance forward to next year, transferred to profit and loss.....		\$200,554 24

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$52,000,000 00
Par value of shares.....	\$100 00	
Number of shares issued.....	520,000	
Amount paid in on common.....	\$28,000,000 00	
Amount paid in on preferred.....	24,000,000 00	
Total amount paid in as per books of the company.....		52,000,000 00
Paid in per mile of road owned by company, 1,594 miles .....		32,622 00

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
1st mortg. bonds, Wabash R. R. Co. ....	5%	1939.....	New York.....	\$31,664,000 00
2d mortg. bonds, Wabash R. R. Co. ....	5%	1939.....	New York.....	14,000,000 00
Debenture bonds.....	6%*	1939.....	New York.....	30,000,000 00
1st mortg. bonds, St. Charles Bridge.....	6%	1908.....	New York.....	1,000,000 00
2d mortg. bonds, St. Charles Bridge.....	7%	1903.....	New York.....	388,500 00
1st mortg. bonds, Boone Co. & Boonville R. R. ....	7%	1903.....	New York.....	100,000 00
1st mortg. bonds, Brunswick & Chillicothe R. R. ....	6%	1903.....	New York.....	304,500 00
1st mortg. bonds, St. Louis C. B. & O. R. R. ....	6%	1908.....	New York.....	577,000 00
1st mortg. bonds, Detroit & Chicago Ext. ..	5%	1941.....	New York.....	3,500,000 00
Total funded debt .....				\$81,534,000 00

\* If earned.

## RECAPITULATION.

Total funded debt.....	\$81,534,000 00
Total debt liabilities.....	\$81,534,000 00
Amount of debt liabilities per mile of road (1,695.2 miles).....	48,000 00
Total amount of stock and debt.....	133,534,000 00
Stock and debt per mile of road.....	80,722 00

# WABASH RAILROAD COMPANY.

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## GENERAL BALANCE SHEET.—Dr.

Cost of road, equipment and appurtenances.....		\$133,433,500 00
Other investments:		
Capital stock, American Refrigerator Transit Co.....	\$121,700 00	
Capital stock, Union Depot, Keokuk.....	3,000 00	
Capital stock, Union Depot, Kansas City.....	14,502 00	
Capital stock, Union Elevator Co., Council Bluffs.....	5,000 00	
Bonds, Peru & Detroit R'y Co.....	90,000 00	
Bonds, Des Moines Union R'y.....	36,035 54	
Bonds, St. Louis C. B. & O. R'y.....	33,000 00	
Other investments.....	2,564 68	
		305,823 22
Cash items:		
Cash.....	\$496,757 33	
Bills receivable.....	18,992 94	
Due from agents.....	53,834 30	
		599,604 57
Other assets:		
Materials and supplies.....	\$625,756 92	
Debit balances from companies and individuals.....	825,429 13	
		1,451,186 05
The purchasing committee.....		185,827 43
Chicago & Western Indiana sinking fund.....		371,265 44
Profit and loss.....		990,672 15
Total.....		\$137,327,877 85

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....		\$53,000,000 00
Funded debt.....		51,534,000 00
Unfunded debt:		
Interest unpaid.....	\$780,780 74	
Notes payable.....	816,732 44	
Vouchers and accounts.....	1,649,206 53	
Other liabilities.....	399,445 60	
		3,626,165 31
Profit and loss or income accounts.....		167,712 54
Total.....		\$137,327,877 85

## COST OF ROAD AND EQUIPMENT.

### PURCHASED BY PRESENT COMPANY.

Original cost to present company, of road and equipment.....	\$129,933,500 00
Amount expended since purchase, account of construction Montpelier & Chicago R. R.....	3,500,000 00
Total cost to date of report.....	133,433,500 00
Average cost per mile of road (not including sidings) 1,695.2 miles.....	80,772 33
Proportion of cost for Michigan, 75.9.....	6,188,697 08

## ANALYSIS OF EARNINGS.—IN STATE OF MICHIGAN.

### PASSENGER EARNINGS.

Main line and branches:		
Total passenger fares.....	\$388,472 09	
Express and baggage.....	4,710 52	
Mails.....	7,273 09	
Other sources.....	2,196 06	
Total passenger department earnings.....		\$102,651 76
Per mile of road.....	\$1,275 18	

### FREIGHT EARNINGS.

Main line and branches:		
Total traffic.....	234,288 02	
Other sources, freight department.....	10,866 89	
Total freight department earnings.....		245,154 91
Per mile of road.....	\$3,045 40	

## ANALYSIS OF EARNINGS.—ENTIRE LINES.

## PASSENGER EARNINGS.

Main line and branches:		
Total passenger fares .....	\$2,986,035 73	
Express and baggage .....	300,108 12	
Mails .....	507,027 96	
Other sources .....	78,253 45	
Total passenger department earnings .....		\$3,871,425 26
Per train mile .....	\$0 80.90	
Per mile of road .....	1,939 50	

## FREIGHT EARNINGS.

Main line and branches:		
Total traffic .....	\$7,878,077 70	
Other sources, freight department .....	213,805 43	
Total freight department earnings .....		8,091,883 13
Per train mile .....	\$1 41.83	
Per mile of road .....	4,179 26	
Total transportation earnings, entire line .....		\$11,963,308 39
Transportation earnings per mile of road .....	\$6,178 76	
Transportation earnings per train mile .....	1 14.09	
Miscellaneous receipts from operating account, other than for transportation, as follows:		
From other sources .....	194,817 56	
Total .....		12,158,125 95

## Distribution of miscellaneous earnings between main line and leased or proprietary roads:

		Proportion for Michigan.
Detroit Elevator Commission .....		\$722 01
Total earnings from operation of road .....		\$11,963,308 39
Total earnings per mile of road .....	\$6,178 76	
Total earnings per train mile .....	1 14.09	
Proportion of taxable earnings for Michigan .....	347,806 67	
Total taxable earnings per mile of road in Michigan .....	4,320 58	
Total income from all sources .....		\$11,963,308 39
Proportion of income for Michigan .....		347,806 67

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway .....	\$853,150 19
Renewals of rails .....	194,624 36
Renewals of ties .....	257,810 41
Repairs and renewals of bridges and culverts .....	187,344 75
Repairs and renewals of fences, road crossings, signs and cattle guards .....	47,290 27
Repairs and renewals of buildings and fixtures .....	160,168 32
Repairs and renewals of docks and wharves .....	671 38
Repairs and renewals of telegraph .....	17,105 30
Stationery and printing .....	1,129 76
Other expenses .....	96,025 67
Total .....	\$1,817,290 35

## MAINTENANCE OF EQUIPMENT.

Superintendence .....	\$104,640 34
Repairs and renewals of locomotives .....	502,931 72
Repairs and renewals of passenger cars .....	387,887 86
Repairs and renewals of freight cars .....	496,083 12
Repairs and renewals of work cars .....	12,716 71
Repairs and renewals of shop machinery and tools .....	75,961 00
Stationery and printing .....	4,336 47
Other expenses .....	65,396 17
Total .....	\$1,649,973 39

## CONDUCTING TRANSPORTATION.

Superintendence.....	\$113,580 40
Engine and roundhouse men.....	861,755 29
Fuel for locomotives.....	548,615 25
Water supply for locomotives.....	82,605 67
Oil, tallow and waste for locomotives.....	85,766 68
Other supplies for locomotives.....	5,227 10
Train service.....	600,896 86
Train supplies and expenses.....	54,445 25
Switchmen, flagmen and watchmen.....	422,255 28
Telegraph expenses.....	169,253 44
Station service.....	1,006,066 52
Station supplies.....	41,194 51
Car mileage—balance.....	356,752 04
Hire of equipment.....	9,745 65
Loss and damage.....	75,690 53
Injuries to persons.....	89,732 15
Advertising.....	51,058 75
Outside agencies.....	250,007 91
Commissions.....	42,149 17
Rents for tracks, yards and terminals.....	421,599 08
Rent of buildings and other property.....	17,713 02
Stationery and printing.....	58,330 91
Other expenses.....	69,893 45
<b>Total.....</b>	<b>\$5,361,845 40</b>

## GENERAL EXPENSES.

Salaries of general officers.....	\$44,064 89
Salaries of clerks and attendants.....	38,894 71
General office expenses and supplies.....	1,535 44
Insurance.....	30,254 78
Law expenses.....	51,240 84
Stationery and printing (general offices).....	14,577 68
Other expenses.....	37,998 72
Taxes.....	524,238 60
<b>Total.....</b>	<b>\$742,825 66</b>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	18.99	\$1,817,290 36
Maintenance of equipment.....	17.24	1,649,973 89
Conducting transportation.....	56.01	5,361,345 40
General expenses, including taxes.....	7.76	742,825 66
<b>Total operating expenses and taxes.....</b>	<b>100</b>	<b>\$9,571,434 80</b>
Operating expenses and taxes per mile of road.....		4,943 41
Operating expenses and taxes per train mile run, for trains, earning revenue.....		91.28
Proportion of operating expenses and taxes for Michigan, main line.....		\$292,694 84
Percentage of expenses to earnings, entire line.....	80.01	
Net earnings per mile of road, entire line.....	\$1,235 34	
Net earnings per train mile, entire line.....	22.81	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Detroit to Butler, 1881.

## MAIN LINE.

	Miles.
In Michigan, from Delray to Ohio State Line.....	75.9
Total length completed.....	75.9
Total length of road belonging to this company in Michigan.....	75.9
Aggregate length in Michigan of sidings, spurs and other tracks not above enumerated.....	38.5
Aggregate length of tracks in Michigan belonging to this company, computed as single track.....	114.4
Gauge of track, 4 feet 8½ inches.	

*Proprietary or leased roads operated by this company.*

Name, description and length of each:	Total miles. In Michigan.	
Detroit Union Depot & Terminal Association tracks .....		4.6
Total miles operated by this company .....	1,979.6	80.5

*Number of bridges and trestles in Michigan.*

	Number.	Aggregate length, feet.
Wooden bridges .....	33	336
Iron bridges .....	1	184
Combination bridges .....	1	194
Wooden trestles .....	84	4,768
Total .....	119	5,472

*Draw bridges in Michigan.*

How many on your line:

One—not in operation.

Where located, when built, and length of draw span:

Over Rouge River,  $\frac{1}{4}$  mile west of Dearborn Road, Detroit. Draw span, 184 feet. Finished November, 1893.

Character of structure:

Through iron truss.

Material of which constructed:

Iron truss on masonry—7x7 oak ties.

Height above water, and depth of water under bridge:

Ten feet above, 15 feet under water.

How swung, by engine or hand power?

Hand power.

Approaches straight or curved?

Straight.

Do you require all trains to come to full stop before crossing a draw, and how are they signaled?

The draw is not yet in operation. Rails are continuous. No signals required.

*Crossings.—Railroad and highway.*

What railroads cross your road at grade in this State, and at what locality?

Lake Shore & Michigan Southern R. R. at Delray, Raisin Center and Adrian.

Michigan Central R. R. at Delray and West Detroit.

Flint & Pere Marquette R. R. at Romulus.

Toledo, A. A. & Northern Michigan R. R. at Milan.

Cincinnati, Jackson & Mackinaw R. R. at Britton.

At what crossings are interlocking and derailing switches in operation?

L. S. & M. S.—Delray, Raisin Center and Adrian.

Michigan Central—Delray and West Detroit.

Flint & Pere Marquette—Romulus.

What pattern or patterns have you adopted?

Saxby and Farmer, made by Union Switch & Signal Co.

Number of crossings of highways at grade in this State .....

159

Number of crossings of highways at grade in this State at which there are gates or flagmen .....

1

Have safety guards been erected at overhead obstructions?

Yes.

Are your frogs and guard rails blocked as required by act 174, session laws 1893?

Yes.

How are they treated?

Blocked with plank.

*Stations.*

Number of stations on whole lines .....	496
Same in Michigan .....	16



# WABASH RAILROAD COMPANY.

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## Employees.

Number of persons regularly employed on all roads operated by company, including officials	7,678
Classify your employees as per following list:	Number.
Baggagemen .....	12
Brakemen .....	36
Conductors .....	24
Engineers .....	20
Firemen .....	20
Laborers .....	189
Shopmen .....	26
Others .....	56

## REPAIRS AND RENEWALS.

### Fencing in Michigan.

How many miles of fencing have you? .....	75.198
Give the number of miles required to complete fence both sides of your track in Michigan, and the counties in which needed:	
None. All fenced except in station limits.	

### Road bed and track.

Number of track sections in Michigan .....	12
Average lengths of sections, miles .....	6.9
Average number of men in each section gang .....	7.5
Number of new ties put in track in Michigan .....	25,879
Average number of new ties per mile of road .....	340

### Bridges and culverts.

Timber culverts replaced during the year:	Number.
With iron pipe .....	2
With sewer pipe .....	6
With timber .....	2

New bridges built during the year.—Number 1.

Location.	Kind.	Material.	Month built.	Feet in length.
One quarter of a mile west of Seneca.	Wooden .....	Piling .....	June, 1896.	104 ft.

## ROLLING STOCK.—ENTIRE LINE.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender .....	380	\$1,500,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender .....	85	114,000 00
Total .....	418	\$1,614,000 00
Number of passenger cars—12-wheel, including official cars .....	118	\$350,000 00
Number of passenger cars—8-wheel, including official cars .....	99	125,000 00
Number of express and baggage cars .....	110	100,000 00
Number of box freight cars .....	6,185	1,175,000 00
Number of stock cars .....	1,085	200,000 00
Number of platform and ore cars .....	5,189	500,000 00
Number of conductors' way cars .....	225	40,000 00
Other cars .....	83	8,000 00
Total .....	13,024	\$2,488,000 00
Number of locomotives equipped with power brakes .....	402	
Number of passenger-train cars equipped with power brakes .....	327	
Number of freight cars equipped with power brakes .....	2,117	

What patterns of power brakes have you in use, and number of locomotives and cars with each?  
All cars with Westinghouse. Locomotives—306 Westinghouse; 96 American steam.

Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885, as amended by Act No. 88, Session Laws of 1887?

Yes.

What pattern or patterns have you adopted for use?

Gould.

How are your passenger cars heated?

Hard coal stoves and hot water.

### MILEAGE, TRAFFIC, ETC.

	<i>Train mileage.</i>	<i>Entire lines. In Michigan.</i>	
Miles run by passenger trains during the year .....	4,780,808	191,212	
Miles run by freight trains during the year .....	5,708,280	228,210	
Total mileage of trains earning revenue.....	10,489,088	419,422	

#### *Passenger traffic.—Entire lines.*

	<i>Numbers.</i>	<i>Miles.</i>	<i>Rate.</i>
Total number of passengers carried, earning revenue .....	3,270,701		
Number of passengers carried one mile .....	142,680,692		
Average distance carried.....		43.5	
Average amount received from each passenger .....			\$0 91.80
Average receipts per passenger per mile for all passengers.....			02.088
Estimated cost of carrying each passenger one mile .....			01.910

#### *Passenger traffic.—In State of Michigan (Estimated).*

	<i>Numbers.</i>	<i>Miles.</i>	<i>Rate.</i>
Total number of passengers carried, earning revenue.....	130,828		
Number of passengers carried one mile.....	5,708,428		
Average distance carried.....		43.5	
Average amount received from each passenger .....			\$0 91.80
Average receipts per passenger per mile for all passengers.....			02.088
Estimated cost of carrying each passenger one mile .....			01.910

#### *Freight traffic.—Entire lines.*

	<i>Tons.</i>	<i>Miles.</i>	<i>Rate.</i>
Total tons of freight carried, earning revenue.....	5,879,674		
Total freight mileage or tons carried one mile.....	1,142,477,577		
Average ton haul for all freight.....		194.3	
Average amount received for each ton haul .....			\$1 38.98
Average receipts ton per mile, for all freight.....			00.689
Estimated cost of carrying one ton one mile.....			00.517

#### *Freight traffic.—In State of Michigan (Estimated).*

	<i>Tons.</i>	<i>Miles.</i>	<i>Rate.</i>
Total tons of freight carried, earning revenue .....	235,187		
Total freight mileage or tons carried one mile .....	45,999,108		
Average ton haul for all freight .....		194.3	
Average amount received for each ton haul .....			\$1 38.98
Average receipts ton per mile, for all freight.....			00.689
Estimated cost of carrying one ton one mile.....			00.517

## FREIGHT TRAFFIC MOVEMENT.—ENTIRE LINES.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain .....			1,178,979	20.05
Flour .....			117,632	2.00
Other mill products .....			121,705	2.07
Hay .....			79,197	1.34
Tobacco .....			6,217	0.11
Cotton .....			20,582	0.36
Fruit and vegetables .....			87,152	1.48
<b>Products of animals:</b>				
Live stock .....			340,607	5.79
Dressed meats .....			126,675	2.15
Other packing house products .....			156,163	2.66
Wool .....			3,240	0.06
Hides and leather .....			34,079	0.58
<b>Products of mines:</b>				
Anthracite coal .....			114,371	1.95
Bituminous coal .....			1,432,119	24.36
Coke .....			28,823	0.49
Ores .....			4,843	0.08
Stone, sand and other like articles .....			121,490	2.07
<b>Products of forest:</b>				
Lumber .....			287,510	4.89
Other articles .....			116,978	1.99
<b>Manufactures:</b>				
Petroleum and other oils .....			58,782	1.00
Sugar .....			42,157	0.72
Iron, pig and bloom .....			28,044	0.39
Iron and steel rails .....			6,857	0.10
Other castings and machinery .....			29,915	0.51
Bar and sheet metal .....			30,536	0.52
Cement, brick, and lime .....			101,554	1.73
Agricultural implements .....			12,553	0.21
Wagons, carriages, tools, etc. ....			8,715	0.15
Wines, liquors and beers .....			42,229	0.72
Household goods and furniture .....			15,049	0.26
<b>Merchandise</b> .....			408,215	6.94
<b>Miscellaneous:</b>				
Other commodities not mentioned above .....			721,896	12.28
<b>Total tonnage</b> .....			5,879,674	100.

## FREIGHT TRAFFIC MOVEMENT.—IN STATE OF MICHIGAN.—ESTIMATED.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....			47,159	20.05
Flour.....			4,705	2.00
Other mill products.....			4,868	2.07
Hay.....			3,168	1.34
Tobacco.....			249	0.11
Cotton.....			824	0.35
Fruit and vegetables.....			3,487	1.48
<b>Products of animals:</b>				
Live stock.....			13,624	5.79
Dressed meats.....			5,067	2.15
Other packing house products.....			6,246	2.66
Wool.....			130	0.06
Hides and leather.....			1,863	0.83
<b>Products of mines:</b>				
Anthracite coal.....			4,575	1.95
Bituminous coal.....			57,285	24.36
Coke.....			1,153	0.49
Ores.....			194	0.08
Stone, sand and other like articles.....			4,860	2.07
<b>Products of forest:</b>				
Lumber.....			11,500	4.89
Other articles.....			4,679	1.99
<b>Manufactures:</b>				
Petroleum and other oils.....			2,349	1.00
Sugar.....			1,686	0.72
Iron, pig and bloom.....			922	0.39
Iron and steel rails.....			267	0.10
Other castings and machinery.....			1,197	0.51
Bar and sheet metal.....			1,223	0.52
Cement, brick and lime.....			4,062	1.73
Agricultural implements.....			502	0.21
Wagons, carriages, tools, etc.....			349	0.15
Wines, liquors and beers.....			1,690	0.72
Household goods and furniture.....			602	0.26
<b>Merchandise.....</b>			<b>16,329</b>	<b>6.94</b>
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....			26,573	12.28
<b>Total tonnage.....</b>			<b>235,187</b>	<b>100</b>

## ADDITIONAL QUESTIONS.

*Express companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

Pacific Express Co.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

208.5 miles on Detroit Division. Western Union Telegraph Company.

*Transportation Companies.*

## SLEEPING, DRAWING-ROOM AND PALACE CAR COMPANIES.

What sleeping, drawing-room, chair or other palace passenger cars, not the exclusive property of your own or some other railroad company, have, during the year, been in use on your road in the State of Michigan, and on what terms? If rented by you, or allowed mileage between local points in this State, what was the amount paid for the use of such cars during the period under report?

Name of company.	General office.	Amount paid.
Wagner Palace Car Co.....	New York, N. Y.....	(*)

\* Not kept separate for Michigan.

*Fast freight lines.*

To what fast freight lines, or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

Name of company.	General office.	Amount paid.
Blue Line.....	.....	Not kept separate for Michigan.
Red Line.....	.....	
White Line.....	.....	
Empire Line.....	.....	
Midland Line.....	.....	
Canadian Pacific Despatch.....	.....	
Canada Southern Line.....	.....	
Erie Despatch.....	.....	
Great Eastern Line.....	.....	
Merchants' Despatch Transportation Co.....	.....	
National Despatch Line.....	.....	
Hoosac Tunnel Line.....	.....	
Lackawanna Line.....	.....	

## MICHIGAN RAILROAD RETURNS, 1896.

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

## KILLED AND INJURED.

January 15, Jno. Mitchell, switchman, Delray. Coupling cars. Glove frozen to link; accidental.  
 February 29, Theo. Warner, trespasser, Holloway. Foot caught between drawbars of cars on which he was stealing a ride; misconduct.  
 April 29, Wm. Hunter, citizen, North Morenci. Killed by being struck on crossing; was blind.  
 September 7, John Clark, boy 15 years, trespasser, Detroit. Jumped from moving train and died from injuries.  
 November 25, C. D. Sonday, fireman, Milan. Fell from engine while lighting headlight; accidental.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Coupling cars.....					1	
Falling from trains.....					1	
Highway crossings.....			1			
Trespassers on trains.....			1			1
Total.....			2		2	1

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year .....	2
Number of persons injured during the year .....	3
Number of casualties purely accidental.....	3
Number resulting from lack of caution, carelessness, or misconduct.....	2
Trespassers and tramps killed or injured.....	2

## CLASSIFICATION OF EMPLOYÉS.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Firemen .....		1	1
Yardmen.....		1	1
Total.....		2	2

STATE OF MISSOURI, } ss.  
 City of St. Louis, }

Joseph Ramsey, vice president, of the Wabash Railroad Company, being duly sworn deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declares them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of his knowledge and belief.

[L. S. OF R. R.]

Signed,

JOS. RAMSEY, JR.,  
 Vice President and General Manager.

Subscribed and sworn to before me this 19th day of March, A. D. 1897.

[L. S.]

Commission expires Nov. 1, 1897,

B. C. WINSTON,  
 Notary Public, City of St. Louis, Mo.

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# DEPOT AND STATION COMPANIES

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**ANNUAL REPORT**  
**OF THE**  
**DETROIT UNION RAILROAD DEPOT & STATION COMPANY,**

*For the year ending December 31, 1896.*

[Filed March 27, 1897.]

**NAMES AND RESIDENCES OF OFFICERS OF THE COMPANY.**

*President, JAMES JOY, Detroit, Mich.*  
*Vice President, HENRY B. JOY, Detroit, Mich.*  
*Secretary, JAMES G. MILLER, Detroit, Mich.*  
*Treasurer, HENRY B. JOY, Detroit, Mich.*

**ORGANIZATION, ETC.**

When chartered or articles of association filed: June 11, 1881.  
 Number of stockholders at date of last election: 17.  
 Number of stockholders in Michigan at same date: 15.  
 Date of annual meeting of stockholders: On the first Wednesday in February.  
 General offices of company located at Detroit, Mich.

**STOCKHOLDERS, DECEMBER 31, 1896.**

Names.	Residence.	Amount held.
James F. Joy .....	Detroit, Mich. ....	\$40,000 00
James Joy, Henry B. Joy, and E. P. Joy, trustees .....	" " .....	205,000 00
James Joy .....	" " .....	127,500 00
Henry B. Joy .....	" " .....	132,500 00
Henry B. Joy, guardian .....	" " .....	56,300 00
Richard P. Joy .....	" " .....	132,500 00
Helen N. Joy .....	" " .....	63,200 00
Louise Todd Joy .....	Louisville, Ky. ....	56,200 00
Allan Shelden .....	Detroit, Mich. ....	506,300 00
James McMillan .....	" " .....	281,200 00
T. D. Buhl .....	" " .....	290,000 00
Frank H. Buhl .....	Sharon, Pa. ....	135,000 00
Caroline Buhl .....	Detroit, Mich. ....	10,000 00
Helen H. Newberry, executrix .....	" " .....	56,300 00
Helen H. Newberry .....	" " .....	56,200 00
Truman H. Newberry .....	" " .....	56,300 00
J. Stoughton Newberry .....	" " .....	56,300 00
G. W. Balch .....	" " .....	19,200 00
<b>Total .....</b>		<b>\$2,250,000 00</b>



## CAPITAL STOCK.

By whom subscribed.	Residence.	No. of shares.	Amount.
James F. Joy .....	Detroit, Mich. ....	1,666 2/3	\$166,667 00
C. H. Buhl .....	" " .....	1,666 2/3	166,667 00
Allen Shelden .....	" " .....	1,666 2/3	166,667 00
James McMillan .....	" " .....	1,250	125,000 00
John S. Newberry .....	" " .....	1,250	125,000 00
R. A. Alger .....	" " .....	833 1/3	83,333 00
M. S. Smith .....	" " .....	833 1/3	83,333 00
G. W. Balch .....	" " .....	833 1/3	83,333 00
Total .....		10,000	\$1,000 000 00

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

There is no funded debt. No mortgages or encumbrance of any kind whatever upon this company's property. The bonds issued some years ago have all been cancelled and stock issued therefor. There is now only a stock issue outstanding for say \$2,250,000.

## COST.

Of real estate, including right of way .....	\$1,278,070 05
Of depot buildings and fixtures .....	62,196 27
Of elevators and belongings .....	308,595 87
Other items .....	114,558 36
Of all other property .....	611,137 81
Total cost .....	<u>\$2,364,558 36</u>

## CASH PAID TO CORPORATION.

On account of original capital stock .....	\$1,000,000 00
On account of increase of capital stock .....	1,250,000 00
On other accounts, other than for income .....	114,558 36
Total cash paid .....	<u>\$2,364,558 36</u>

## TRACK.

Length of single main track—miles .....	3.34
Length of sidings and other tracks—miles .....	3.50
Total track .....	<u>6.84</u>

## ANALYSIS OF EARNINGS AND EXPENSES.

## EARNINGS.

From rentals .....	\$62,287 47
From all other sources .....	19,811 72
Total earnings .....	<u>\$112,099 19</u>

## EXPENSES.

## Operating.

Salaries of officers and clerks .....	\$2,500 00
Management and maintenance .....	19,328 36
Taxes .....	4,024 41
Miscellaneous .....	33 52
Total .....	<u>\$25,884 29</u>

## RECAPITULATION.

Expenses for operating and taxes.....	\$25,884 29
Total expenses for the year .....	<u>\$25,884 29</u>

## ADDITIONAL INTERROGATORIES.

## DESCRIPTION AND CHARACTER OF BUILDINGS AND OTHER PROPERTY.

Passenger houses, brick; not used as such any longer.  
 Freight houses, brick; number, one.  
 Grain elevator, brick; number, one, capacity, about 1,250,000 bushels.  
 Sheds, freight, brick; number, one.  
 Water front and docks, feet: About 2,500 feet, with two large ferry slips to accommodate freight and passenger transfer across the Detroit river.

## STREET CROSSINGS, ETC.

At grade, number, 19.  
 Frogs and guard rails, are they blocked as required by law? Yes.

## CONTRACTS AND LEASES.

What railroad companies have rented terminal privileges from you during the year, and on what terms?  
 No railroad companies have rented terminal privileges during 1896. On February 27, 1896, Hon. James F. Joy sent per U. S. mail a book containing all the contracts and leases of this company, to be placed on file in your office, for your information.

## VERIFICATION.

STATE OF MICHIGAN, } ss.  
 COUNTY OF WAYNE, }

James Joy, president, and James G. Miller, secretary, of the Detroit Union Railroad, Depot and Station Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of the said company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

Signed,

JAMES JOY,  
 JAMES G. MILLER.

Subscribed and sworn to before me this 26th day of March, A. D. 1897.

[L. S.]

F. W. DENNIS,  
 Notary Public.

ANNUAL REPORT  
OF THE  
FORT STREET UNION DEPOT COMPANY,

*For the year ending December 31, 1896.*

[Filed March 24, 1897.]

NAMES AND RESIDENCES OF OFFICERS OF THE COMPANY.

*President, WM. W. CRAPO, New Bedford, Mass.  
Vice President, CHAS. M. HEALD, Grand Rapids, Mich.  
Secretary and Treasurer, HENRY B. JOY, Detroit, Mich.*

ORGANIZATION, ETC.

When chartered or articles of association filed: August 24, 1889.  
Number of stockholders at date of last election: 15.  
Number of stockholders in Michigan at same date: 7.  
Date of annual meeting of stockholders: First Wednesday in February.  
General offices of the company are located at Room 1, Newberry Building, Detroit, Mich.

STOCKHOLDERS, DECEMBER 31, 1896.

Names.	Residence.	Amount held.
W. C. Van Horne.....	Montreal.....	\$125,000 00
T. G. Shaughnessy.....	Montreal.....	92,500 00
Thos. Taft.....	Montreal.....	32,500 00
Wm. W. Crapo.....	New Bedford.....	50,000 00
Wm. W. Crapo, trustee.....	New Bedford.....	199,000 00
Stanford T. Crapo.....	Saginaw.....	1,000 00
N. Thayer, Chas. Merriam and E. N. R. Thayer, trustees under will of H. Thayer.....	Boston.....	249,000 00
Chas. M. Heald.....	Grand Rapids.....	1,000 00
James Joy.....	Detroit.....	14,000 00
Henry B. Joy.....	Detroit.....	13,000 00
J. Ramsey, Jr.....	St. Louis.....	1,000 00
Richard P. Joy.....	Detroit.....	14,000 00
J. Joy, H. B. Joy and R. P. Joy executors under will of J. F. Joy.....	Detroit.....	42,800 00
Allan Sheldon.....	Detroit.....	56,900 00
Frank H. Buhl.....	Sharon, Penn.....	15,200 00
Theo. D. Buhl.....	Detroit.....	30,400 00
Helen H. Newberry, executrix.....	Detroit.....	31,800 00
James McMillan.....	Detroit.....	31,800 00
Total.....		\$1,000,000 00

## ORIGINAL CAPITAL STOCK SUBSCRIBERS.

By whom subscribed.	Residence.	No. of shares.	Amount.
W. C. Van Horne .....	Montreal .....	1,000	\$100,000 00
O. D. Ashley .....	New York .....	1,000	100,000 00
Edm. R. Oaler .....	Toronto .....	250	25,000 00
Wm. W. Crapo .....	New Bedford .....	750	75,000 00
E. G. Butler .....	Detroit .....	250	25,000 00
Lewis Pierce .....	Portland, Me. ....	250	25,000 00
George Coppell .....	New York .....	250	25,000 00
Alfred Stebbins .....	Boston, Mass. ....	625	62,500 00
Frank H. Damon .....	Boston, Mass. ....	625	62,500 00
Wm. L. Webber .....	Saginaw .....	10	1,000 00
Total .....		5,010	\$501,000 00

Capital stock since increased to \$1,000,000 all paid in.

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Character and date of issue.	Rate of interest.	When due.	Payable when.	Amount outstanding.
First mortgage bonds .....	4½%	1941 .....	January and July	\$1,000,000 00

## UNFUNDED DEBT.

For real estate and construction, *i. e.*, to complete the work—Bills payable .....

\$310,694 40

## RECAPITULATION.

Total funded debt .....	\$1,000,000 00
Total unfunded debt .....	310,694 40
Total indebtedness .....	\$1,310,694 40
Total stock and debt .....	\$2,310,694 40

## COST.

Of real estate, including right of way .....	\$1,259,212 74
Of depot buildings and fixtures, and elevated railroad structure .....	699,927 48
Of all other property .....	349,509 61
Total cost .....	\$2,308,649 83

## CASH PAID TO CORPORATION.

On account of original capital stock .....	\$501,000 00
On account of increase of capital stock .....	499,000 00
On other accounts, other than for income:	
Bonds sold .....	1,000,000 00
Bills payable .....	310,694 40
Total cash paid .....	\$2,310,694 40

## TRACK.

Length of double track, main line—miles .....	1.41
Length of sidings and other tracks—miles .....	1.27
Total track .....	2.68

## ANALYSIS OF EARNINGS AND EXPENSES.

## EARNINGS.

From rentals .....	\$125,437 29
From all other sources .....	711 93
Total earnings .....	<u>\$126,149 22</u>

## EXPENSES.

## Operating.

Salaries of officers and clerks .....	\$1,500 00
Taxes .....	6,693 11
Miscellaneous .....	150 78
Total .....	<u>\$8,343 84</u>

## RECAPITULATION.

Expenses for operating and taxes .....	\$8,343 84
Total expenses for the year .....	<u>8,343 84</u>

## ADDITIONAL INTERROGATORIES.

## DESCRIPTION AND CHARACTER OF BUILDINGS AND OTHER PROPERTY.

Passenger houses, brick and stone, number, 1.  
 Freight houses, brick and stone, number, 1.

## STREET CROSSINGS, ETC.

Over or under grade?  
 Approach is by elevated railroad along and over a street for about two-thirds of a mile.  
 Over bridges, number, 1.

Frogs and guard rails, are they blocked as required by law?  
 Yes.

## CONTRACTS AND LEASES.

What railroad companies have rented terminal privileges from you during the year and on what terms?  
 This company's property is leased to and occupied by the following four railroads, viz.: Wabaah, F. & P. M., D. L. & N., and Canadian Pacific, upon the terms that each road shall pay its share of an annual rental sufficient to pay 5% per annum on the stock and bonds; also, cost of operation expense and interest on floating debt.

## VERIFICATION.

STATE OF MICHIGAN, }  
 COUNTY OF WAYNE, } ss.

Wm. W. Crapo, president, and Henry B. Joy, secretary, of The Fort Street Union Depot Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of the said company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

WM. W. CRAPO, *President.*  
 HENRY B. JOY, *Secretary.*

Subscribed and sworn to before me this 3d day of February, A. D. 1897.

[L. s.]

F. W. DENNIS,  
*Notary Public.*



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# ORE AND FOREST ROADS

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**ANNUAL REPORT**  
**OF THE**  
**BEAR LAKE & EASTERN RAILROAD COMPANY,**

*For the year ending December 31, 1896.*

[Filed January 6, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President, G. W. HOPKINS, Bear Lake, Mich.*  
*Secretary, D. H. HOPKINS, Bear Lake, Mich.*  
*Auditor, G. W. HOPKINS, Bear Lake, Mich.*  
*Treasurer, E. S. HOPKINS, Bear Lake, Mich.*  
*General Manager, G. W. HOPKINS, Bear Lake, Mich.*  
*General Superintendent, C. G. WAREHAM, Bear Lake, Mich.*

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: January 24, 1882.  
 Number of stockholders at date of last election: 7.  
 Number of stockholders in Michigan at same date: 7.  
 Amount of full paid stock held in Michigan at same date: All of stock.  
 Date of annual meeting of stockholders: January 31.  
 Fiscal year of company ends: December 31.  
 General offices of the company are located at Bear Lake, Mich.

**GENERAL EXHIBIT.**

	Debit.	Credit.
Total earnings from operation.....		\$7,305 28
Total expenses, included taxes.....	\$5,573 58	
Net income.....		<u>\$1,821 70</u>
Balance for the year .....		\$1,821 70
Balance (profit and loss) last year.....		10,314 51
Balance forward to next year.....		<u>\$12,136 21</u>

**ANALYSIS OF CAPITAL STOCK.**

Amount authorized by charter or articles of association .....		\$250,000 00
Par value of shares.....	\$100 00	
Number of shares issued .....	1,046	
Total amount paid in, as per books of the company.....		104,664 00
Paid in per mile of road owned by company, 18 miles.....		<u>5,814 66</u>



## ANALYSIS OF DEBT ACCOUNTS.

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For miscellaneous .....	To be paid from net earnings .....	\$8,691 71

## RECAPITULATION.

Total unfunded debt .....	\$8,691 71
Total debt liabilities .....	\$8,691 71
Amount of debt liabilities per mile of road, 18 miles .....	482 87
Total amount of stock and debt .....	118,355 71
Stock and debt per mile of road, 18 miles .....	6,297 53

## GENERAL BALANCE SHEET.—Dr.

Construction account .....	\$95,276 20
Equipment account .....	30,215 72
Total .....	\$125,491 92

## GENERAL BALANCE SHEET.—Cr.

Capital stock .....	\$104,664 09
Unfunded debt .....	8,691 71
Profit and loss or income accounts .....	12,136 21
Total .....	\$125,491 92

## COST OF ROAD AND EQUIPMENT.

Total cost for construction and equipment of road and branches built by company.

Total expended for construction and equipment .....	\$125,491 92
Average cost per mile of road (not including sidings), 18 miles .....	6,971 77
Proportion of cost for Michigan .....	6,971 77

## ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

Main line and branches:	
Total passenger fares .....	\$24 70
Total passenger department earnings .....	\$24 70

## FREIGHT EARNINGS.

Main line and branches:	
Total traffic .....	\$7,370 58
Total freight department earnings .....	7,370 58
Total transportation earnings, entire line .....	\$7,395 28
Transportation earnings per mile of road .....	\$410 85
Total earnings from operation of road .....	\$7,395 28
Total earnings per mile of road .....	410 85
Proportion of taxable earnings for Michigan .....	7,395 28
Total income from all sources .....	\$7,395 28
Proportion of income for Michigan .....	7,395 28

## MICHIGAN RAILROAD RETURNS, 1896.

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway.....	\$1,682 87
Repairs and renewals of bridges and culverts.....	127 20
Repairs and renewals of fences, road crossings, signs and cattle guards.....	10 42
<b>Total.....</b>	<b>\$1,820 49</b>

## MAINTENANCE OF EQUIPMENT.

Repairs and renewals of locomotives.....	\$235 31
Repairs and renewals of freight cars.....	378 38
<b>Total.....</b>	<b>\$613 69</b>

## CONDUCTING TRANSPORTATION.

Superintendence.....	\$1,000 00
Fuel for locomotives.....	647 70
Oil, tallow and waste for locomotives.....	80 32
Train service.....	790 28
<b>Total.....</b>	<b>\$2,518 30</b>

## GENERAL EXPENSES.

Salaries of general officers.....	\$300 00
General office expenses and supplies.....	175 00
Other expenses.....	146 10
<b>Total.....</b>	<b>\$621 10</b>

## RECAPITULATION OF EXPENSES.

Maintenance of way and structures.....	\$1,820 49
Maintenance of equipment.....	613 69
Conducting transportation.....	2,518 30
General expenses, including taxes.....	621 10
<b>Total operating expenses and taxes.....</b>	<b>\$5,573 58</b>
Operating expenses and taxes per mile of road.....	309 64
Total proportion of expenses for Michigan.....	5,573 58
Percentage of expenses to earnings.....	75.78

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Pierport, Mich., to Maple Grove, Mich., Nov. 1, 1887.

## MAIN LINE.

	Miles.	Miles.
In Michigan, from Pierport to Maple Grove.....	18	
<b>Total length completed.....</b>		<b>18</b>
Total length of road belonging to this company.....		18
Total length of road belonging to this company in Michigan.....	18	
Aggregate length of tracks in Michigan belonging to this company, computed as single track.....		18

Gauge of track, 3 feet.

If north of parallel 44 of latitude:  
Yes.

## Number of bridges and trestles in Michigan.

	Number.	Aggregate length feet.
Wooden bridges.....	3	96
Wooden trestles.....	3	766
<b>Total.....</b>	<b>6</b>	<b>862</b>

*Crossings.—Railroad and highway.*

Number of crossings of highways at grade in this State ..... 13  
 Number of crossings of highways over or under railroad: under, 1..... 1

*Stations.*

Number of stations on whole lines ..... 5  
 Same in Michigan ..... 5

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials ..... 11  
 Same in Michigan ..... 11

Classify your employees as per following list:

	Number.
Engineers .....	2
Firemen .....	2
Laborers .....	4
Shopmen .....	1
Others .....	2

**REPAIRS AND RENEWALS.***Fencing in Michigan.*

How many miles of fencing have you? ..... 17

Give the number of miles required to complete fence both sides of your track in Michigan, and the counties in which needed:

Manistee county ..... 19

Total miles required ..... 19

*Road bed and track.*

Number of track sections in Michigan ..... 1  
 Average lengths of sections, miles ..... 18  
 Average number of men in each section gang ..... 4

New bridges built during the year—number, 1.

Location.	Kind.	Material.	Month built.	feet in length.
Manistee County .....	Wooden trestle .....	.....	July .....	66

**ROLLING STOCK.**

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender .....	1	
Number of locomotives of 20 to 30 tons weight, exclusive of tender .....	2	
Total .....	3	\$9,500 00
Number of passenger cars—8-wheel, including official cars.....	1	\$1,000 00
Number of platform cars.....	53	16,215 72
Other cars .....	14	3,500 00
Total .....	68	\$30,215 72

**ADDITIONAL QUESTIONS.***Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
 Six. Poles to B. L. & E. R. R.; wire to Western Union Telegraph Co.

STATE OF MICHIGAN, }  
COUNTY OF MANISTEE, } ss.

G. W. Hopkins, president, and E. S. Hopkins, treasurer, of the Bear Lake and Eastern Railroad Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

GEO. W. HOPKINS,  
E. S. HOPKINS.

Subscribed and sworn to before me this 5th day of January, A. D. 1897.

[L. S.]

C. C. BURGESS,  
*Notary Public.*

ANNUAL REPORT  
OF THE  
CRAWFORD & MANISTEE RIVER RAILWAY COMPANY,

*For the year ending December 31, 1896.*

[Filed April 7, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, A. E. CARTIER, Ludington, Mich.  
*Vice President*, JAMES DEMPSEY, Manistee, Mich.  
*Secretary and Auditor*, WM. WENTE, Manistee, Mich.  
*Treasurer*, L. T. DEMPSEY, Manistee, Mich.  
*General Manager and General Superintendent*,  
N. DOWEN, Fletcher, Mich.  
*General Freight Agent*, N. DOWEN, Fletcher, Mich.

DIRECTORS.

ALLEN McKEN, Manistee, Mich.  
Term expires December 1, 1897.  
A. E. CARTIER, Ludington, Mich.  
Term expires December 1, 1898.  
JAMES DEMPSEY, Manistee, Mich.  
Term expires December 1, 1899.  
L. T. DEMPSEY, Manistee, Mich.  
Term expires December 1, 1901.  
WM. WENTE, Manistee, Mich.  
Term expires December 1, 1902.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: September 28, 1885.  
Number of stockholders at date of last election: 7.  
Number of stockholders in Michigan at same date: 7.  
Amount of full paid stock held in Michigan at same date: \$50,000.  
Date of annual meeting of stockholders: First Tuesday in December.  
Fiscal year of company ends: December 31.  
General offices of the company are located at Manistee, Mich.

GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$7,687 52
Total expenses, including taxes.....	\$7,610 27	
Net income .....		\$77 25
Balance applicable to dividends.....		77 25
Dividends declared (.00532 per cent).....		266 01
Balance for the year.....	\$188 76	
Balance (profit and loss) last year.....		188 76

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$50,000 00
Par value of shares.....	\$100 00	
Amount paid in on common.....	\$50,000 00	
Total amount paid in as per books of the company.....		50,000 00
Paid in per mile of road owned by company.....		5,000 00

## ANALYSIS OF DEBT ACCOUNTS.

## RECAPITULATION.

Total debt liabilities.....	\$50,000 00
Amount of debt liabilities per mile of road, 10 miles.....	5,000 00
Total amount of stock and debt.....	50,000 00
Stock and debt per mile of road, 10 miles.....	5,000 00

## GENERAL BALANCE SHEET.—Dr.

Construction account.....	\$45,566 58
Equipment account.....	11,618 18
Total.....	\$57,184 76

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$50,000 00
Profit and loss or income accounts.....	7,184 76
Total.....	\$57,184 76

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction and equipment.....	\$57,184 76
Average cost per mile of road (not including sidings), 10 miles.....	5,718 47
Proportion of cost for Michigan.....	57,184 76

## ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

## FREIGHT EARNINGS.

Main line and branches:		
Through traffic.....	\$7,687 52	
Total traffic.....		\$7,687 52
Total freight department earnings.....		\$7,687 52
Per train mile.....	\$0 72	
Per mile of road.....	768 75	
Total transportation earnings, entire line.....		\$7,687 52
Transportation earnings per mile of road.....	\$768 75	
Transportation earnings per train mile.....	72	
Total earnings from operation of road.....		\$7,687 52
Total earnings per mile of road.....	768 75	
Total earnings per train mile.....	72	
Proportion of taxable earnings for Michigan.....	7,687 52	
Total income from all sources.....		\$7,687 52

# CRAWFORD & MANISTEE RIVER RAILWAY COMPANY. 539

## ANALYSIS OF EXPENSES.

### MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway .....	\$3,214 14
Renewals of ties.....	360 00
Total.....	<u>\$3,574 14</u>

### MAINTENANCE OF EQUIPMENT.

Repairs and renewals of locomotives.....	\$60 00
Repairs and renewals of freight cars.....	1,182 85
Total.....	<u>\$1,242 85</u>

### CONDUCTING TRANSPORTATION.

Engine and roundhouse men.....	\$624 20
Fuel for locomotives.....	657 93
Water supply for locomotives.....	211 18
Other supplies for locomotives.....	514 15
Train supplies and expenses.....	253 75
Station service.....	114 54
Stationery.....	114 54
Other expenses.....	114 54
Total.....	<u>\$2,675 75</u>

### GENERAL EXPENSES.

Taxes .....	\$117 53
Total.....	<u>\$117 53</u>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures .....	46.96	\$3,574 14
Maintenance of equipment.....	16.33	1,242 85
Conducting transportation.....	35.16	2,675 75
General expenses, including taxes.....	1.55	117 53
Total operating expenses and taxes.....	100.00	<u>\$7,610 27</u>
Operating expenses and taxes per mile of road.....	\$761 03	
Operating expenses and taxes per train mile run, for trains, earning revenue 10,600 miles.....	71.7	\$7,610 27
Proportion of operating expenses and taxes for Michigan—Main line.....	98.99	7 72
Percentage of expenses to earnings.....		0.72
Net earnings per mile of road.....		
Net earnings per train mile.....		

## DESCRIPTION OF ROAD.

### MAIN LINE.

	Miles.	Miles.
In Michigan, from Manistee River to forest terminus.....		10
Total length completed.....		10
Total length of road belonging to this company in Michigan.....	10	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated.....		3
Aggregate length of tracks in Michigan belonging to this company, computed as single track.....		<u>13</u>
Gauge of track, 3 feet.		

### Crossings.—Railroad and highway.

Number of crossings of highways at grade in this State.....	<u>8</u>
-------------------------------------------------------------	----------

*Stations.*

Number of stations on whole lines.....	2
----------------------------------------	---

*Employés.*

Number of persons regularly employed on all roads operated by company, including officials	18
--------------------------------------------------------------------------------------------	----

Classify your employés as per following list:

	Number.
Brakemen.....	1
Conductors.....	1
Engineers.....	1
Firemen.....	2
Laborers.....	13
Shopmen.....	1

## REPAIRS AND RENEWALS.

*Road bed and track.*

Number of track sections in Michigan.....	1
Average number of men in each section gang.....	6
Number of new ties put in whole line during the year.....	6,000
Number of new ties put in track in Michigan.....	6,000
Average number of new ties per mile of road.....	600

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of 10 to 20 tons weight, exclusive of tender.....	1	\$4,000 00
Total.....	1	\$4,000 00
Number of platform cars.....	34	\$5,100 00
Other cars, as follows: Hand cars.....	2	50 00
Total.....	36	\$5,150 00

## MILEAGE, TRAFFIC, ETC.

*Train mileage.*

	All in Michigan.
Miles run by freight trains during the year.....	10,600
Total mileage of trains earning revenue.....	10,600

*Freight traffic.—Road all in State of Michigan.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue ....	31,147		
Total tons of freight carried, earning revenue.....	31,147		
Total mileage of through freight.....		10	
Total freight mileage or tons carried one mile.....		31,147	
Average ton haul for through freight.....		10	
Average ton haul for all freight.....		10	
Average amount received for each ton haul.....			\$0 24.6
Average receipts ton per mile, for through freight.....			02.4
Average receipts ton per mile, for all freight.....			02.4
Estimated cost of carrying one ton one mile.....			02.1



## FREIGHT TRAFFIC MOVEMENT.—ROAD ALL IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
Products of forest: Logs -----	31,147	-----	31,147	100.

STATE OF MICHIGAN, } ss.  
COUNTY OF MANISTEE, }

James Dempsey, vice president, and Wm. Wente, secretary of the Crawford & Manistee River Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

JAMES DEMPSEY, *Vice President.*WM. WENTE, *Secretary.*

Subscribed and sworn to before me this 5th day of April, A. D., 1897.

JAMES W. DEMPSEY,  
*Notary Public Man'atee Co.*

ANNUAL REPORT  
OF THE  
DEAD RIVER RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed April 10, 1897.]

OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President, WILLIAM KNIGHT, Cleveland, Ohio.*  
*Secretary, W. A. BROWN, Marquette, Mich.*  
*Treasurer, R. K. HAWLEY, Cleveland, Ohio,*

DIRECTORS.

R. K. HAWLEY, Cleveland, Ohio.  
WILLIAM KNIGHT, Cleveland, Ohio.  
JAMES BRAHANNY, Marquette, Mich.  
D. H. BALL, Marquette, Mich.  
GEO. P. CUMMINGS, Detroit, Mich.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: November 11, 1889.  
Number of stockholders at date of last election: 7.  
Number of stockholders in Michigan at same date: 5.  
Amount of full paid stock held in Michigan at same date: Not any.  
Date of annual meeting of stockholders: No arrangement for annual meeting.  
Fiscal year of company ends: December 31.  
General offices of the company are located at Marquette, Mich.

REMARKS.

This road is operated by the Duluth, South Shore & Atlantic Railway Company under contract with R. K. Hawley and T. H. McGraw, wherein said Duluth, South Shore & Atlantic Railway Co., agree to haul certain logs belonging to said Hawley & McGraw, for a stated price per thousand feet.

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....			\$25,000 00
Par value of shares.....	\$100 00		
Amount paid in on preferred, 5% of 200.....		\$1,000 00	
Cost of construction paid in full.....		51,010 96	
Total amount paid in, as per books of the company.....			\$52,010 96
Paid in per mile of road owned by company.....			17,453 34

## ANALYSIS OF DEBT ACCOUNTS.

## RECAPITULATION.

Total amount of stock and debt.....	\$25,000 00
Stock and debt per mile of road.....	8,899 26

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road, and branches built by company.*

Total expended for construction.....	\$51,010 96
Average cost of construction per mile of road (not including sidings), 2 98 miles.....	17,117 77
Proportion of cost of construction for Michigan: All in Michigan.....	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
August 11, 1890.

MAIN LINE.		Miles.	Miles.
Length completed in Michigan.....		2.98	
Total length completed.....			2.98
Total length of road belonging to this company.....			2.98
Total length of road belonging to this company in Michigan.....	2.98		
Aggregate length of sidings, spurs, and other tracks not above enumerated..	.17		
Same in Michigan.....	.17		
Aggregate length of tracks belonging to this company, computed as single track.....			3.15
Same in Michigan.....	3.15		

Gauge of track, 4 feet 8½ inches.

STATE OF MICHIGAN, } ss.  
COUNTY OF MARQUETTE, }

William Knight, president, and W. A. Brown, secretary, of the Dead River Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers, and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

WILLIAM KNIGHT, *President.*  
W. A. BROWN, *Secretary.*

Subscribed and sworn to before me this 8th day of April, A. D. 1897.

[L. S.]

F. J. SCHULTHEIS,  
*Notary Public, Marquette Co., Mich.*

**ANNUAL REPORT**  
**OF THE**  
**HECLA & TORCH LAKE RAILROAD COMPANY,**

*For the year ending December 31, 1896.*

[Filed February 23, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President, ALEX AGASSIZ, Boston.*  
*Secretary, J. N. COX, Calumet.*  
*Treasurer, J. N. COX, Calumet.*  
*General Manager, S. B. WHITING, Calumet.*  
*General Superintendent, W. A. CHILDS, Calumet.*  
*Assistant General Superintendent, CHRIST BURCH, Calumet.*

**DIRECTORS.**

*ALEX. AGASSIZ, Cambridge, Mass.*  
*Q. A. SHAW, West Roxbury, Mass.*  
*S. B. WHITING, Calumet, Mich.*  
*JOHN DUNCAN, Calumet, Mich.*  
*W. A. CHILDS, Calumet, Mich.*  
*Terms expire June, 1897.*

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: 1867.  
 Number of stockholders at date of last election: 5.  
 Number of stockholders in Michigan at same date: 3.  
 Amount of full paid stock held in Michigan at same date: \$200.00.  
 Date of annual meeting of stockholders: Third Wednesday in June.  
 Fiscal year of company ends April 30.  
 General offices of the company are located at Calumet, Mich.

**REMARKS.**

The road is operated and wholly owned by the Calumet and Hecla Mining Co., which pays any deficit that may occur for the privilege of having its rock transported free.

**GENERAL EXHIBIT.**

	Debit.	Credit.
Total expenses, including taxes.....	\$104,052 72	\$104,052 72

**ANALYSIS OF CAPITAL STOCK.**

Amount authorized by charter or articles of association .....		\$150,000 00
Par value of shares.....	\$100 00	
Number of shares issued.....	1,000	
Total amount paid in, as per books of the company.....		100,000 00
Paid in per mile of road owned by company.....		13,333 33

## ANALYSIS OF DEBT ACCOUNTS.

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For construction.....	.....	\$690,282 84

## RECAPITULATION.

Total unfunded debt.....	\$690,282 84
Total debt liabilities.....	\$690,282 84
Amount of debt liabilities per mile of road, 7½ miles.....	92,037 70
Total amount of stock and debt.....	790,282 84
Stock and debt per mile of road, 7½ miles.....	105,363 77

## GENERAL BALANCE SHEET.—Dr.

Construction account.....	\$790,282 84
Total.....	\$790,282 84

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$100,000 00
Unfunded debt.....	690,282 84
Total.....	\$790,282 84

## COST OF ROAD AND EQUIPMENT.

Total cost for construction and equipment of road, and branches built by company.

Total expended for construction and equipment.....	\$790,282 84
Proportion of cost for Michigan: All.....	
Average cost per mile of road (not including sidings).....	\$105,363 77

## ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

## FREIGHT EARNINGS.

Main line and branches:	
Local traffic.....	\$101,422 98
Total transportation earnings entire lines.....	\$104,052 72
Transportation earnings per mile of road.....	13,874 80
Transportation earnings per train mile.....	1 98

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway.....	\$12,883 78
Renewals of rails.....	1,200 00
Renewals of ties.....	500 00
Other expenses—signal tower.....	360 00
Total.....	\$14,943 78

## MAINTENANCE OF EQUIPMENT.

Not kept separate.

## CONDUCTING TRANSPORTATION.

Fuel for locomotives.....	\$11,431 29
Train service.....	49,708 35
Train supplies and expenses.....	25,339 56
Total.....	<u>\$86,479 20</u>

## GENERAL EXPENSES.

Taxes.....	\$2,629 74
Total.....	<u>\$2,629 74</u>

## RECAPITULATION OF EXPENSES.

Maintenance of way and structures.....	\$17,573 52
Conducting transportation.....	88,849 46
General expenses, including taxes.....	2,629 74
Total operating expenses and taxes.....	<u>\$104,052 72</u>

## DESCRIPTION OF ROAD.

## MAIN LINE.

	Miles.
In Michigan, from Calumet to Lake Linden.....	<u>6</u>

## BRANCHES.

From Hecla to South Hecla.....	1	
From Hecla to Calumet.....	0.2	
Total length of branches owned by company.....		1.2
Total length of branches owned by company in Michigan.....	1.2	
Total length of road belonging to this company.....		7.2
Total length of road belonging to this company in Michigan.....	7.2	

Gauge of track, 4 feet 1 inch.

## Number of bridges and trestles in Michigan.

	Number.	Aggregate length feet.
Wooden trestles.....	5	1,500

## Crossings.—Railroad and highway.

What railroads cross your road at grade in this State, and at what locality?  
Mineral Range R. R. at Calumet.

What railroads cross your road either over or under your grade in this State, and where?  
Under:  
Hancock & Calumet R. R. at Calumet.

At what crossings are interlocking and derailing switches in operation?  
Mineral Range.

What pattern or patterns have you adopted?  
U. S. & S. Co.

Number of crossings of highways at grade in this State.....	3
Number of crossings of highways at grade in this State at which there are gates or flagman....	2
Number of crossings at which there are electric or automatic signals.....	1

Are your frogs and guard rails blocked as required by act 174, session laws of 1883?  
Yes.

How are they treated?  
Iron choke pieces.

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials. 88

Classify your employees as per following list:

	Number.
Brakemen.....	18
Conductors.....	6
Engineers.....	6
Firemen.....	6
Laborers.....	30
Shopmen.....	4
Yardmen.....	8
Others.....	10

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you ..... 15

*Road bed and track.*

Number of track sections in Michigan ..... 3  
Average number of men in each section gang ..... 6

## ROLLING STOCK.

	Number.	Present estimated value
Number of locomotives of more than 30 tons weight, exclusive of tender.....	10	\$89,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender.....	1	7,600 00
Total.....	11	\$96,600 00
Number of passenger cars—8-wheel, including official cars.....	1	\$475 00
Number of box freight cars.....	4	950 00
Number of coal cars.....	30	6,900 00
Number of platform cars.....	45	9,975 00
Number of ore cars.....	380	85,500 00
Number of conductors' way cars.....	3	685 00
Other cars.....	4	8,450 00
Total.....	467	\$112,915 00

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?

No, cars always had safety couplers.

What pattern or patterns have you adopted for use?

Childs; cars couple after deadwoods meet; no danger to men making or unmaking trains.

## MILEAGE, TRAFFIC, ETC.

*Train mileage.*

Miles run by freight trains during the year ..... In Michigan. 54,000

*Freight traffic.—Road all in State of Michigan.*

	Tons.	Miles.	Rate.
Total tons of freight carried, earning revenue.....	1,459,622		
Total mileage of through freight.....		54,000	
Total freight mileage or tons carried one mile.....		10,947,168	
Average receipts ton per mile, for all freight.....			0.07

## FREIGHT TRAFFIC MOVEMENT.—ROAD ALL IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
<b>Products of agriculture:</b>				
Grain.....	408			
Hay.....	130			
<b>Products of mines:</b>				
Anthracite coal.....	3,171			
Bituminous coal.....	115,915			
Coke.....	95			
Ores, rock.....	1,308,294			
Stone, sand and other like articles.....	2,108			
Salt.....	8			
<b>Products of forest:</b>				
Lumber.....	24,876			
Shingles.....	44			
<b>Manufactures:</b>				
Petroleum and other oils.....	379			
Castings and machinery.....	1,251			
Bar and sheet metals.....	130			
Cement, brick and lime.....	2,257			
<b>Miscellaneous:</b>				
Other commodities not mentioned above.....	561			
<b>Total tonnage.....</b>	<b>1,459,622</b>			

STATE OF MICHIGAN, }  
COUNTY OF HOUGHTON, } ss.

Will A. Childs, superintendent, and James N. Cox, secretary, of the Hecla & Torch Lake Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF E. E.]

Signed,

WILL A. CHILDS,  
JAMES N. COX.

Subscribed and sworn to before me this 20th day of February, A. D. 1897.

[L. S.]

L. W. KILLMAR,  
Notary Public, in and for Houghton Co.



**ANNUAL REPORT**  
**OF THE**  
**LAKE SUPERIOR & ISHPEMING RAILWAY COMPANY,**

*For the year ending December 31, 1896.*

[Filed May 22, 1897.]

**OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.**

*President, WM. G. MATHER, Cleveland, Ohio.*  
*Vice President, JAS. LAUGHLIN, JR., Pittsburg, Pa.*  
*Secretary, J. H. HOYT, Cleveland, Ohio.*  
*Auditor, J. C. URICH, Marquette, Mich.*  
*Treasurer, W. G. POLLOCK, Cleveland, Ohio.*  
*General Manager, JOHN M. EGAN, Marquette, Mich.*  
*Attorney, GEO. HAYDEN, Ishpeming, Mich.*

**DIRECTORS.**

**WM. G. MATHER, Cleveland, Ohio.**  
**JAS. LAUGHLIN, JR., Pittsburg, Pa.**  
**J. H. WADE, New York, N. Y.**  
**B. F. JONES, JR., Pittsburg, Pa.**  
**W. G. POLLOCK, Cleveland, Ohio.**  
**J. H. HOYT, Cleveland, Ohio.**  
**GEO. HAYDEN, Ishpeming, Mich.**

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: February 24, 1893; (dated February 17, 1893; amendment dated September 12, 1895.)

Number of stockholders at date of last election: 10.

Number of stockholders in Michigan at same date: 2.

Amount of full paid stock held in Michigan at same date: 1,251 shares—\$125,100.00.

Date of annual meeting of stockholders: Second Tuesday in February.

Fiscal year of company ends: December 31.

General offices of the company are located at business office at Marquette. Principal office, Ishpeming.

**GENERAL EXHIBIT.**

	Debit.	Credit.
Total earnings from operation.....		\$80,900 25
Total expenses, including taxes.....	\$31,839 30	
Net income.....		\$49,010 95
Interest on funded debt.....	37,278 70	
Interest on unfunded debt.....	5,329 59	
Balance for the year.....		8,407 66
Balance forward to next year.....		\$8,407 66

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association as amended.....	\$1,000,000 00
Par value of shares.....	\$100 00
Number of shares issued.....	10,000
Amount paid in on common.....	1,000,000 00
Total amount paid in, as per books of the company.....	\$1,000,000 00
Paid in per mile of road owned by company, 20½ miles.....	48,780 49

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, character and date of issue.	Rate of Interest.	When due.	Where payable.	Amount outstanding.
Gold bonds, January 1, 1896.....	6%	January 1, 1926.	New York City...	\$1,200,000 00

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated?	Amount.
For equipment.....	To be paid in cash.....	\$184,179 75
For real estate.....	" " ".....	8,755 00
For miscellaneous.....	" " ".....	16,519 71
Total unfunded debt.....		\$209,454 46

## RECAPITULATION.

Total funded debt.....	\$1,200,000 00
Total unfunded debt.....	209,454 46
Total debt liabilities.....	\$1,409,454 46
Amount of debt liabilities per mile of road, 20½ miles.....	68,753 88
Total amount of stock and debt.....	2,409,454 46
Stock and debt per mile of road, 20½ miles.....	117,534 86

## GENERAL BALANCE SHEET.—Dr.

Construction account.....	\$925,479 04
Equipment account.....	288,557 56
Other investments:	
Rights of way, terminal lands, contracts and labor.....	1,000,000 00
Cash items:	
Cash.....	10,445 65
Other assets:	
Materials and supplies.....	30,249 87
Debit balances from companies and individuals.....	161,130 00
Total.....	\$2,415,862 12

# LAKE SUPERIOR & ISHPEMING RAILWAY COMPANY. 551

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$1,000,000 00	
Funded debt.....	1,200,000 00	\$2,200,000 00
Unfunded debt:		
Notes payable.....	\$192,934 75	
Vouchers and accounts.....	16,519 71	
Profit and loss or income accounts.....	6,407 66	215,862 12
Total.....		\$2,415,862 12

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction and equipment.....	\$2,214,086 60
Average cost per mile of road (not including sidings), 20.5 miles.....	108,001 79
Proportion of cost for Michigan: All.....	

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

### MAIN LINE.

Extensions and new sidings.....	\$1,917,538 30
New buildings.....	7,895 31
New fences.....	18 31
Machinery and tools.....	27 12
New locomotives.....	110,585 26
New cars.....	177,972 30
Total.....	\$2,214,086 60
Total charges to property account as above.....	2,214,086 60
Net addition to property account.....	2,214,086 60

## ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

### FREIGHT EARNINGS.

Main line and branches:		
Local traffic.....	\$67 79	
Through traffic.....	80,532 46	
Total traffic.....		\$80,900 25
Total freight department earnings.....		\$80,900 25
Per train mile.....	\$6 15	
Per mile of road.....	3,946 35	
Total transportation earnings, entire line.....		\$80,900 25
Transportation earnings per mile of road.....	3,946 35	
Transportation earnings per train mile.....	6 15	
Total earnings from operation of road.....		\$80,900 25
Total earnings per mile of road.....	3,946 35	
Total earnings per train mile.....	6 15	
Proportion of taxable earnings for Michigan.....		80,900 25
Total taxable earnings per mile of road in Michigan.....		3,946 35
Total income from all sources.....		\$80,900 25
Proportion of income for Michigan.....		80,900 25

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway.....	\$3,410 72
Repairs and renewals of bridges and culverts.....	338 37
Repairs and renewals of fences, road crossings, signs and cattle guards.....	50 55
Repairs and renewals of buildings and fixtures.....	179 06
Repairs and renewals of docks and wharves.....	49 63
Stationery and printing.....	21 75
<b>Total</b> .....	<b>\$4,050 10</b>

## MAINTENANCE OF EQUIPMENT.

Superintendence.....	\$180 00
Repairs and renewals of locomotives.....	469 64
Repairs and renewals of freight cars.....	834 06
Stationery and printing.....	4 00
Other expenses.....	10 00
<b>Total</b> .....	<b>\$1,497 70</b>

## CONDUCTING TRANSPORTATION.

Superintendence.....	\$4,755 44
Engine and roundhouse men.....	2,689 09
Fuel for locomotives.....	3,961 06
Water supply for locomotives.....	263 41
Oil, tallow and waste for locomotives.....	105 49
Train service.....	845 23
Train supplies and expenses.....	347 29
Switchmen, flagmen and watchmen.....	1,695 65
Telegraph expenses.....	878 00
Station service.....	5,875 24
Station supplies.....	801 64
Loss and damage.....	179 14
Injuries to persons.....	488 48
Clearing wrecks.....	47 30
Rent of buildings and other property.....	165 00
Stationery and printing.....	232 15
Other expenses.....	84 51
<b>Total</b> .....	<b>\$23,414 32</b>

## GENERAL EXPENSES.

Salaries of general officers.....	\$1,000 00
Salaries of clerks and attendants.....	392 00
General office expenses and supplies.....	827 44
Insurance.....	632 50
Stationery and printing (general offices).....	65 82
Other expenses.....	9 42
<b>Total</b> .....	<b>\$2,927 18</b>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	12.70	\$4,050 10
Maintenance of equipment.....	4.70	1,497 70
Conducting transportation.....	73.42	23,414 32
General expenses, including taxes.....	9.18	2,927 18
<b>Total operating expenses and taxes</b> .....	<b>100.00</b>	<b>\$31,889 30</b>
Operating expenses and taxes per mile of road.....		\$1,555 57
Operating expenses and taxes per train mile run, for trains, earning revenue, 13,150 miles.....		2 42
Proportion of operating expenses and taxes for Michigan—Main line.....		31,889 30
<b>Total proportion of expenses for Michigan</b> .....		<b>\$31,889 30</b>
Percentage of expenses to earnings.....	39.42	
Net earnings per mile of road.....		2,390 78
Net earnings per train mile.....		8 78

# LAKE SUPERIOR & ISHPEMING RAILWAY COMPANY. 553

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Presque Isle to Ishpeming, August 12, 1896.

MAIN LINE.	Miles.	Miles.
In Michigan, from Presque Isle to Ishpeming.....		20.50
Total length completed .....		20.50
Total length of road belonging to this company .....		20.50
Total length of road belonging to this company in Michigan.....	20.50	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated ..		6.35
Aggregate length of tracks in Michigan belonging to this company, computed as single track.....		26.85

Gauge of track, 4 feet 8½ inches.

If north of parallel 44 of latitude?  
Yes.

Give date road commenced to be built:  
December 1, 1895.

Give date road completed:  
August 12, 1896.

Give date road commenced to be operated:  
August 12, 1896.

Where built from and to:  
Presque Isle (Marquette), to Ishpeming.

Give exact number of miles:  
20½ miles.

### Number of bridges and trestles in Michigan.

	Number.	Aggregate length, feet.
Wooden bridges.....	8	1,898
Combination bridges.....	7	3,304
Wooden trestles.....	2	2,412
Total.....	17	7,609

### Crossings.—Railroad and highway.

What railroads cross your road at grade in this State, and at what locality?  
Marquette & Presque Isle Street R. R. at Presque Isle.  
South Jackson mine track of C. & N. W. R'y at Negaunee.

What railroads cross your road either over or under your grade in this State, and where?  
Under:  
D., S. S. & A. R. R. at Bagdad, Negaunee and Morgan Furnace.  
C. & N. W. R. R. at Negaunee.

Number of crossings of highways at grade in this State.....	9
Number of crossings of highways at grade in this State at which there are gates or flagmen.....	1
Number of crossings of highways over or under railroad: under .....	8

Are your frogs and guard rails blocked as required by act 174, session laws of 1883?  
Yes.

How are they treated?  
Blocked with wood.

### Stations.

Number of stations on whole lines.....	8
----------------------------------------	---

### Employés.

Number of persons regularly employed on all roads operated by company, including officials.....	85
Same in Michigan.....	81

Classify your employes as per following list:

	Number.
Conductors .....	5
Engineers .....	5
Firemen .....	5
Laborers .....	30
Shopmen .....	5
Yardmen .....	15
Others .....	20

## REPAIRS AND RENEWALS.

## Fencing in Michigan.

How many miles of fencing have you?

None.

Give the number of miles required to complete fence both sides of your track in Michigan, and the counties in which needed:

All in Marquette county .....	34
Total miles required .....	34

## Road bed and track.

Number of track sections in Michigan .....	3
Average length of sections (miles) .....	7
Average number of men in each section gang .....	5
Number of new ties put in whole line during the year (road just completed) .....	54,120
Number of new ties put in track in Michigan .....	54,120
Average number of new ties per mile of road .....	2,640
New rails put in track:	
Steel, tons 2,400; miles, 20% .....	20%
Total miles of track laid with new rails .....	

New bridges built during the year: Number 15.

Location.	Kind.	Material.	Month built.	Feet in length.
Between Presque Isle & Ishpeming	Pile trestle .....	Wood .....	June to Aug., '96	1,893
Between Presque Isle & Ishpeming	Pile trestle, steel span.	Steel .....	June to Aug., '96	3,304

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender .....	11	\$99,639 24
Total .....	11	\$99,639 24
Number of platform cars .....	20	\$6,596 19
Number of ore cars .....	400	152,486 91
Number of conductors' way cars .....	4	1,933 20
Other cars as follows: 5 hand cars; 4 push cars .....	9	274 77
Total .....	433	\$161,291 07
Number of locomotives equipped with power brakes .....		11
Number of freight cars equipped with power brakes .....		420

What patterns of power brakes have you in use, and number of locomotives and cars with each?

All engines and cars equipped with Westinghouse automatic air brakes.

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?

All are now equipped as required by law.

What pattern or patterns have you adopted for use?

Tower.

How are your passenger cars heated?

Have no passenger cars.

# LAKE SUPERIOR & ISHPEMING RAILWAY COMPANY. 555

## MILEAGE, TRAFFIC, ETC.

### Train mileage.

	In Michigan.
Miles run by freight trains during the year.....	13,150
Total mileage of trains earning revenue.....	13,150

### Freight traffic.—Road all in State of Michigan.

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	299,354		
Number of tons of local freight carried, earning revenue.....	202		
Total tons of freight carried, earning revenue.....	299,556		
Total mileage of through freight.....		6,133,769	
Total mileage of local freight.....		2,988	
Total freight mileage or tons carried one mile.....		6,136,757	
Average ton haul for through freight.....		20%	
Average ton haul for local freight.....		14.8	
Average ton haul for all freight.....		20.48	
Average amount received for each ton haul.....			\$0 27
Average receipts ton per mile, for through freight.....			01.3
Average receipts ton per mile, for local freight.....			02.3
Average receipts ton per mile, for all freight.....			01.8
Estimated cost of carrying one ton one mile.....			0.52

## FREIGHT TRAFFIC MOVEMENT.—ROAD ALL IN STATE OF MICHIGAN.

### Company's material excluded.

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
Products of mines:				
Bituminous coal.....		8,523	8,523	2.84
Ores.....	290,813		290,813	97.08
Products of forest:				
Lumber.....	202		202	0.07
Merchandise.....		18	18	0.01
Total tonnage.....	291,015	8,541	299,556	100.00

## ADDITIONAL QUESTIONS.

### Telegraph.

Number of miles of telegraph on your road, and to whom does it belong?  
23 miles; belongs to this company (Lake Superior & Ishpeming Ry. Co.)

## REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

### INJURED.

April 8, A. J. Dube, axeman engineering corps, Presque Isle. Got in way of pile driver; his own fault.  
August 15, John Zakra, laborer, Presque Isle. Rail slipped; accidental.  
August 20, Philip Miller, laborer, Presque Isle. Attempting to lower chute unaided; his own carelessness.  
September 30, John McGovern, bridge carpenter, Bagdad. Did not notice approaching train; his own carelessness.  
September 23, David Maki, laborer, Presque Isle. Ran hook into his foot; carelessness.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Miscellaneous.....	-----	-----	-----	-----	5	-----
Total.....	-----	-----	-----	-----	5	-----

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons injured during the year .....	5
Number of casualties purely accidental .....	1
Number resulting from lack of caution, carelessness, or misconduct.....	4

## CLASSIFICATION OF EMPLOYÉS.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Laborers.....	-----	4	4
Not classified above.....	-----	1	1
Total.....	-----	5	5

STATE OF OHIO, } ss.  
COUNTY OF CUYAHOGA, }

Wm. G. Mather, president, and James H. Hoyt, secretary, of the Lake Superior & Ishpeming Railway Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF E. E.]

Signed,

WM. G. MATHER,  
JAMES H. HOYT.

Subscribed and sworn to before me this 20th day of May, A. D. 1897.

[L. S.]

GUSTAV VON DEN STEINEN,  
Notary Public.



# ANNUAL REPORT

## OF THE

# LEWISTON & SOUTHEASTERN RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed April 19, 1897.]

### OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.

*President*, D. M. KNEELAND, Lewiston, Mich.  
*Vice President*, HENRY MANTZ, Lewiston, Mich.  
*Secretary*, HENRY BAUMAN, Lewiston, Mich.  
*Treasurer*, HENRY BAUMAN, Lewiston, Mich.  
*General Manager*, HENRY MANTZ, Lewiston, Mich.  
*General Superintendent*, HENRY MANTZ, Lewiston, Mich.  
*Chief Engineer*, HENRY BAUMAN, Lewiston, Mich.  
*General Freight Agent*, CHAS. A. BIGELOW, Detroit, Mich.

### DIRECTORS.

D. M. KNEELAND, Lewiston, Mich.  
 H. A. BAUMAN, Lewiston, Mich.  
 HENRY MANTZ, Lewiston, Mich.  
 WILLIAM MANTZ, Lewiston, Mich.  
 BYRON B. FARRIES, Lewiston, Mich.  
 HERMAN LUNDENE, Lewiston, Mich.  
 GEO. L. ALEXANDER, Grayling, Mich.  
 Terms expire May 26, 1897.

### STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: May 26, 1896.  
 Number of stockholders at date of last election: 8.  
 Number of stockholders in Michigan at same date: 8.  
 Amount of full paid stock held in Michigan at same date: \$30,000.  
 Date of annual meeting of stockholders: May 26, 1896.  
 Fiscal year of company ends December 31.  
 General offices of the company are located at Lewiston, Mich.

### GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$2,384 70
Total expenses, including taxes.....	\$7,448 78	
Net deficit.....	\$5,064 08	
Balance for the year.....	5,064 08	

### ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$30,000 00
Par value of shares.....	\$100	
Amount paid in on common.....	\$30,000 00	
Total amount paid in, as per books of the company.....		60,000 00
Paid in per mile of road owned by company.....		6,000 00

## MICHIGAN RAILROAD RETURNS, 1896.

## RECAPITULATION.

Total debt liabilities.....	\$80,000 00
Stock and debt per mile of road, 10 miles .....	6,000 00

## GENERAL BALANCE SHEET.—Dr.

Construction account.....	\$20,300 97
Equipment account.....	4,480 85
	\$24,781 82
Other assets:	
Sinking funds .....	35,935 97
Total.....	\$60,717 79

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$80,000 00
Profit and loss or income accounts.....	717 79
Total.....	\$80,717 79

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction and equipment .....	\$24,781 82
Average cost per mile of road (not including sidings) 10 miles.....	2,478 18
Proportion of cost for Michigan.....	24,781 82

*Purchased by present company.*

When purchased: May 26, 1896.	
Original cost to present company, of road and equipment .....	\$19,000 00
Amount expended since purchase, account of construction .....	5,575 97
Amount expended since purchase, account of equipment .....	205 85
Total cost to date of report .....	24,781 82
Average cost per mile of road (not including sidings), 10 miles.....	2,478 18
Proportion of cost for Michigan.....	24,781 82

## ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

## FREIGHT EARNINGS.

## Main line and branches:

Through traffic.....	\$2,384 70
Total traffic.....	\$2,384 70
Total freight department earnings .....	\$2,384 70
Per train mile .....	\$0 61
Per mile of road .....	238 47
Total transportation earnings, entire line.....	\$2,384 70
Transportation earnings per mile of road.....	238 47
Transportation earnings per train mile.....	61
Total.....	\$2,384 70
Total earnings per mile of road .....	238 47
Total earnings per train mile .....	61
Proportion of taxable earnings for Michigan.....	2,384 70
Total taxable earnings per mile of road in Michigan .....	238 47
Total income from all sources .....	\$2,384 70
Proportion of income for Michigan.....	2,384 70

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway.....	\$4,318 57
Renewals of rails.....	548 96
Renewals of ties.....	507 45
Repairs and renewals of buildings and fixtures.....	200 00
<b>Total.....</b>	<b>\$5,575 97</b>

## MAINTENANCE OF EQUIPMENT.

Repairs and renewals of locomotives.....	\$5 85
Repairs and renewals of freight cars.....	200 00
<b>Total.....</b>	<b>\$205 85</b>

## CONDUCTING TRANSPORTATION.

Engine and roundhouse men.....	\$455 00
Fuel for locomotives.....	325 00
Oil, tallow and waste for locomotives.....	29 88
Train service.....	600 00
Switchmen, flagmen and watchmen.....	100 00
<b>Total.....</b>	<b>\$1,509 88</b>

## GENERAL EXPENSES.

Other expenses.....	\$157 08
<b>Total.....</b>	<b>\$157 08</b>

## RECAPITULATION OF EXPENSES.

	Per cent of expenses.	
Maintenance of way and structures.....	74.87	\$5,575 97
Maintenance of equipment.....	2.75	205 85
Conducting transportation.....	20.27	1,509 88
General expenses, including taxes.....	2.11	157 08
<b>Total operating expenses and taxes.....</b>	<b>100</b>	<b>\$7,448 73</b>
Operating expenses and taxes per mile of road.....		\$744 87
Operating expenses and taxes per train mile run, for trains, earning revenue, 3,900 miles..		1 91
Proportion of operating expenses and taxes for Michigan:		
Main line.....	100	
<b>Total proportion of expenses for Michigan.....</b>		<b>\$7,448 73</b>
Percentage of expenses to earnings.....	320.30	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Lewiston, Montmorency county, to forest terminus, Oscoda county, 1896.

## MAIN LINE.

	Miles.
In Michigan, from Lewiston to forest terminus.....	10
<b>Total length completed.....</b>	<b>10</b>
Total length of branches owned by company in Michigan.....	8
<b>Total length of road belonging to this company in Michigan.....</b>	<b>13</b>
Aggregate length of tracks in Michigan belonging to this company, computed as single track.....	13

Gauge of track, 3 feet.

If north of parallel 44 of latitude:  
Yes.

Give date road commenced to be built:  
July 15, 1891.

Give date road completed.  
December 15, 1891.

Give date road commenced to be operated:  
1891.

Where built from and to:  
Lewiston to forest terminus.

Give exact number of miles:  
10 miles.

*Crossings.—Railroad and highway.*

Number of crossings of highways at grade in this State.....	3
Number of crossings of highways over or under railroad—over.....	3

*Stations.*

Number of stations on whole lines.....	2
----------------------------------------	---

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials 39  
Classify your employees as per following list:

	Number.
Brakemen.....	1
Engineers.....	1
Firemen.....	1
Laborers.....	35
Yardmen.....	1

*Road bed and track.*

Number of track sections in Michigan.....	1
Average lengths of sections, miles.....	10
Average number of men in each section gang.....	6
Number of new ties put in whole line during the year.....	10,109
Number of new ties put in track in Michigan.....	10,109
Average number of new ties per mile of road.....	1,010

New rails put in track:  
Steel, tons 24, about  $\frac{1}{4}$  mile.

**ROLLING STOCK.**

	Number.	Present estimated value.
Number of locomotives of 20 to 30 tons weight, exclusive of tender.....	1	\$1,500 00
Number of locomotives of 10 to 20 tons weight, exclusive of tender.....	1	500 00
Total.....	2	\$2,000 00
Number of platform cars.....	30	\$2,250 00
Other cars as follows: Hand car.....	1	25 00
Total.....	31	\$2,275 00

**MILEAGE, TRAFFIC, ETC.**

*Train mileage.*

	In Michigan.
Miles run by freight trains during the year.....	3,900
Total mileage of trains earning revenue.....	3,900

*Freight traffic.—Road all in State of Michigan.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	11,213		
Total tons of freight carried, earning revenue.....	11,213		
Total mileage of through freight.....		10	
Total freight mileage or tons carried one mile.....		112,130	
Average ton haul for through freight.....		10	
Average ton haul for all freight.....		10	
Average amount received for each ton haul.....			\$0 21.3
Average receipts ton per mile, for through freight.....			21.3
Average receipts ton per mile, for all freight.....			21.3
Estimated cost of carrying one ton one mile.....			66.4

LEWISTON & SOUTHEASTERN RAILROAD COMPANY. 561

FREIGHT TRAFFIC MOVEMENT.—ROAD ALL IN STATE OF MICHIGAN.

*Company's material excluded.*

Commodity.	Freight originating on this road. Whole tons.	Freight re- ceived from connecting roads and other carriers. Whole tons.	Total freight tonnage.	
			Whole tons.	Per cent.
Products of forest: Logs.....	11,218	-----	11,218	100.00

REPORTS OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1896.

INJURED.

September 17, Fred Gerniah, fireman, Gust Nelson, laborer, at end of road, or about 10 miles from Lewiston. Axle of car breaking.

STATEMENT OF ACCIDENTS IN MICHIGAN.

Miscellaneous, employ  s injured..... 2

SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons injured during the year..... 2  
Number of casualties purely accidental..... 1

CLASSIFICATION OF EMPLOY  S.

KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Firemen.....	-----	1	-----
Laborers.....	-----	1	-----
Total.....	-----	2	-----

STATE OF MICHIGAN, } ss.  
COUNTY OF MONTMORENCY, }

D. M. Kneeland, president, and H. A. Bauman, secretary, of the Lewiston & Southeastern Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

D. M. KNEELAND, President.  
H. A. BAUMAN, Secretary.

Subscribed and sworn to before me this 16th day of April, A. D. 1897.  
[L. S.]

C. B. DRAKE,  
Notary Public.

ANNUAL REPORT  
OF THE  
MANISTEE & LUTHER RAILROAD COMPANY,

*For the year ending December 31, 1896.*

[Filed March 12, 1897.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, R. G. PETERS, Eastlake, Mich.  
*Vice President*, L. H. WITHEY, Grand Rapids, Mich.  
*Secretary*, H. W. CAREY, Eastlake, Mich.  
*Treasurer*, H. W. CAREY, Eastlake, Mich.  
*General Manager*, R. G. PETERS, Eastlake, Mich.  
*Assistant General Manager*, H. W. CAREY, Eastlake, Mich.  
*Attorney*, A. J. DOVEL, Manistee, Mich.

DIRECTORS.

R. G. PETERS, Eastlake, Mich.  
L. H. WITHEY, Grand Rapids, Mich.  
H. W. CAREY, Eastlake, Mich.  
A. J. DOVEL, Manistee, Mich.  
G. M. BURR, Manistee, Mich.

Terms expire April 2, 1897.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed: March 26, 1886.  
Number of stockholders at date of last election: 7.  
Number of stockholders in Michigan at same date: 7.  
Amount of full paid stock held in Michigan at same date: \$300,000.  
Date of annual meeting of stockholders: First Tuesday in April.  
Fiscal year of company ends December 31.  
General offices of the company are located at Eastlake, Mich.

GENERAL EXHIBIT.

	Debit.	Credit.
Total earnings from operation.....		\$51,392 13
Total expenses, including taxes.....	\$36,966 42	
Net income.....		\$14,425 71
Rentals of buildings and water front.....		2,000 00
Balance for the year.....		\$12,425 71
Balance (profit and loss) last year.....		85,471 85
Balance forward to next year.....		\$97,897 56

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....		\$400,000 00
Par value of shares.....	\$100 00	
Number of shares issued.....	4,000	
Amount paid in on common.....		\$300,000 00
Total amount paid in, as per book of the company.....		300,000 00
Paid in per mile of road owned by company.....		4,761 90

## ANALYSIS OF DEBT ACCOUNTS.

## UNFUNDED DEBT.

For what incurred.	Is the same to be funded or how liquidated.	Amount.
For current balances.....		\$381 09

## RECAPITULATION.

Total unfunded debt.....	\$381 09
Total debt liabilities.....	\$381 09
Amount of debt liabilities per mile of road, 63 miles.....	6 09
Total amount of stock and debt.....	300,381 09
Stock and debt per mile of road, 63 miles.....	4,767 99

## GENERAL BALANCE SHEET.—Dr.

Construction account.....	\$294,474 67
Equipment account.....	71,159 22
	\$365,633 89
Cash items:	
Cash.....	\$1,680 69
	1,680 69
Other assets:	
Debit balances from companies and individuals.....	30,964 07
Total.....	\$396,278 65

## GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$300,000 00
Unfunded debt:	
Other liabilities.....	381 09
Profit and loss or income accounts.....	97,897 56
Total.....	\$396,278 65

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road and branches built by company.*

Total expended for construction and equipment.....	\$365,633 89
Average cost per mile of road (not including sidings).....	5,808 61

*Purchased by present company.*

When purchased: Constructed and equipped by this company.	
Original cost to present company, of road and equipment.....	\$365,633 89
Amount expended since purchase, account of construction.....	294,474 67
Amount expended since purchase, account of equipment.....	71,159 22
Total cost to date of report.....	365,633 89
Average cost per mile of road (not including sidings) 63 miles.....	5,808 71

## MICHIGAN RAILROAD RETURNS, 1896.

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Extensions and new sidings.....	\$10,110 48
Machinery and tools .....	82 15
Total charges to property account as above .....	\$10,192 63
Net addition to property account.....	10,192 63

## ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

## PASSENGER EARNINGS.

Main line and branches:	
Local fares .....	\$197 00
Total passenger department earnings .....	\$197 00
Per mile of road.....	\$8 12

## FREIGHT EARNINGS.

Main line and branches:	
Local traffic .....	51,196 13
Total freight department earnings .....	51,196 13
Per mile of road.....	\$812 62
Total transportation earnings, entire line .....	\$51,392 13
Transportation earnings per mile of road.....	\$815 74
Total earnings from operation of road.....	51,392 13
Total earnings per mile of road.....	815 74
Proportion of taxable earnings for Michigan .....	51,392 13
Taxable earnings per mile of road in Michigan .....	815 74
Total income from all sources .....	\$51,392 13

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway.....	\$9,502 55
Repairs and renewals of bridges and culverts.....	332 39
Repairs and renewals of buildings and fixtures.....	98 00
Total.....	\$9,932 94

## MAINTENANCE OF EQUIPMENT.

Repairs and renewals of locomotives.....	\$4,691 85
Repairs and renewals of freight cars .....	4,291 53
Total.....	\$8,983 38

## CONDUCTING TRANSPORTATION.

Engine and roundhouse men .....	\$2,632 09
Fuel for locomotives.....	4,911 31
Water supply for locomotives.....	111 81
Oil, tallow and waste for locomotives.....	814 26
Train service.....	2,711 11
Train supplies and expenses.....	32 85
Telegraph expenses.....	256 86
Station service.....	2,845 74
Loss and damage.....	45 85
Injuries to persons .....	45 00
Total.....	\$14,896 88



## GENERAL EXPENSES.

Salaries of general officers.....	\$1,000 00
Salaries of clerks and attendants.....	1,000 00
Insurance.....	103 50
Stationery and printing (general offices).....	38 20
Other expenses.....	15 40
Taxes.....	1,496 12
Total.....	<u>\$3,653 22</u>

## RECAPITULATION OF EXPENSES.

Maintenance of way and structures.....	\$9,932 94
Maintenance of equipment.....	8,333 38
Conducting transportation.....	14,396 88
General expenses, including taxes.....	3,653 22
Total operating expenses and taxes.....	<u>\$36,966 42</u>
Total proportion of expenses for Michigan.....	<u>26,966 42</u>

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Eastlake, Mich., to Sec. 4, 18, 12, June, 1896.

MAIN LINE.	Miles.	Miles.
In Michigan, from Eastlake to Sec. 4, 18, 12.....		45

BRANCHES.		
From main line to forest terminals.....	18	
Total length of road owned by company in Michigan.....		63
Aggregate length of tracks in Michigan belonging to this company, computed as single track.....		<u>63</u>
Gauge of track, 3 feet.		

## Number of bridges and trestles in Michigan.

	Number.	Aggregate length, feet.
Wooden bridges.....	3	150
Wooden trestles.....	1	60
Total.....	<u>4</u>	<u>210</u>

## Crossings.—Railroad and highway.

What railroads cross your road at grade in this State, and at what locality?

F. & P. M. R. R. at Eastlake.

G. R. & I. R. R. at Careyville.

C. & W. M. R. R. at Peters.

At what crossings are interlocking and derailing switches in operation?

F. & P. M. R. R.

C. & W. M. R. R.

What pattern or patterns have you adopted?

Second-class interlocker.

## REPAIRS AND RENEWALS.

## Fencing in Michigan.

How many miles of fencing have you?.....	1
Give the number of miles required to complete fence both sides of your track in Michigan.....	<u>62</u>

*Road bed and track.*

Number of track sections in Michigan.....	4
Average lengths of sections, miles.....	15
Average number of men in each section gang.....	10
Number of new ties put in whole line during the year.....	7,000
Number of new ties put in track in Michigan.....	7,000
Average number of new ties per mile of road.....	111

## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender.....	3	\$10,500 00
Number of locomotives of 10 to 20 tons weight, exclusive of tender.....	3	9,000 00
Total.....	6	\$19,500 00
Number of passenger cars—8-wheel, including official cars.....	1	\$1,500 00
Number of box freight cars.....	2	450 00
Number of platform cars.....	10	2,000 00
Number of conductors' way cars.....	1	125 00
Other cars.....	231	46,200 00
Total.....	245	\$69,775 00

Are your freight cars being equipped with automatic couplers as required by act No. 147, session laws of 1885, as amended by act No. 88, session laws of 1887?  
Regular logging car coupling.

How are your passenger cars heated?  
Stoves.

## MILEAGE TRAFFIC, ETC.

*Passenger traffic.—Road all in State of Michigan.*

	Numbers.	Miles.	Rate.
Number of local passengers carried, earning revenue.....	328		
Total number of passengers carried, earning revenue.....	328		
Number of passengers carried one mile.....	6,560		
Average distance carried.....		20	
Average amount received from each passenger.....			\$0 60
Average receipts per mile for local passengers.....			08
Average receipts per passenger per mile for all passengers.....			08

*Freight traffic.—Road all in State of Michigan.*

Number of tons of local freight carried, earning revenue.....	51,400		
Total tons of freight carried, earning revenue.....	51,400		
Average ton haul for local freight.....			\$1 00
Average ton haul for all freight.....			1 00
Average amount received for each ton haul.....			1 00
Average ton receipts per mile, for local freight.....			0 15

## FREIGHT TRAFFIC MOVEMENT.—ROAD ALL IN STATE OF MICHIGAN.

*Company's material excluded.*

## FREIGHT ORIGINATING ON THIS ROAD.—WHOLE TONS.

Products of forest—Logs.....	50,000
Merchandise.....	1,400
Total tonnage.....	51,400

*Telephone.*

Number of miles of telephone on your road, and to whom does it belong?  
35 miles.

STATE OF MICHIGAN, }  
COUNTY OF MANISTEE, } ss.

Henry W. Carey, secretary and treasurer, of the Manistee & Luther Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declares them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of his knowledge and belief.

[L. S. of R. R.]

Signed,

HENRY W. CAREY.

Subscribed and sworn to before me this 9th day of March, A. D. 1897.

[L. S.]

RAYMOND B. GILLETTE,  
*Notary Public.*

**ANNUAL REPORT**  
**OF THE**  
**QUINCY & TORCH LAKE RAILROAD COMPANY,**

*For the year ending December 31, 1896.*

[Filed March 22, 1897.]

**OFFICERS OF THE COMPANY WITH LOCATION OF OFFICES.**

*President*, THOS. F. MASON, New York City.  
*Vice President*, S. B. HARRIS, Hancock, Mich.  
*Secretary, Auditor and Treasurer*:  
 E. D. JOHNSON, Hancock, Mich.  
*General Manager*, S. B. HARRIS, Hancock, Mich.  
*Chief Engineer*, J. L. HARRIS, Hancock, Mich.  
*Attorney*, T. B. DUNSTAN, Hancock, Mich.

**DIRECTORS.**

THOS. F. MASON, New York City.  
 S. B. HARRIS, Hancock, Mich.  
 JAMES ROSS, Hancock, Mich.  
 THOS. WHITTLE, Hancock, Mich.  
 GEO. S. NORTHE, Hancock, Mich.  
 E. D. JOHNSON, Hancock, Mich.  
 T. B. DUNSTAN, Hancock, Mich.  
 Terms expire June 19, 1897.

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed: June 29, 1888.  
 Number of stockholders at date of last election: 7.  
 Number of stockholders in Michigan at same date: 6.  
 Amount of full paid stock held in Michigan at same date. \$800.  
 Date of annual meeting of stockholders: Third Monday in June.  
 Fiscal year of company ends: December 31.  
 General offices of the company are located at Hancock, Mich.

**GENERAL EXHIBIT.**

	Debit.	Credit.
Total earnings from operation.....		\$28,446 85
Total expenses, including taxes.....	\$28,446 85	
Balance (profit and loss) last year.....		\$12,992 21
Balance forward to next year.....		<u>12,992 21</u>

# QUINCY & TORCH LAKE RAILROAD COMPANY.

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## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.....			\$50,000 00
Par value of shares .....	\$100 00		
Number of shares issued.....	500		
Amount paid on common .....		\$50,000 00	
Total amount paid in, as per books of the company.....			50,000 00
Paid in per mile of road owned by company, 6 miles .....			8,333 34

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

Class, character and date of issue.	Rate of interest.	When due.	Where payable.	Amount outstanding.
100 bonds, \$1,000 each.....	6%	1905.....		\$100,000 00

### UNFUNDED DEBT.

For what insured.	Is the same to be funded or how liquidated?	Amount.
For construction.....		\$65,921 23
For equipment.....		

### RECAPITULATION.

Total funded debt.....	\$100,000 00
Total unfunded debt.....	65,921 22
Total debt liabilities.....	\$165,921 22
Amount of debt liabilities per mile of road, 6 miles.....	27,653 54
Total amount of stock and debt.....	215,921 22
Stock and debt per mile of road, 6 miles.....	35,986 85

### GENERAL BALANCE SHEET.—Dr.

Equipment account.....	\$228,913 73
Total .....	\$228,913 73

### GENERAL BALANCE SHEET.—Cr.

Capital stock.....	\$50,000 00
Funded debt.....	100,000 00
Unfunded debt:	
Vouchers and accounts .....	65,921 52
Profit and loss or income accounts .....	12,992 21
Total.....	\$228,913 73

### COST OF ROAD AND EQUIPMENT.

Total cost for construction and equipment of road and branches built by company.

Total expended for construction and equipment.....	\$228,913 73
Average cost per mile of road (not including sidings) 6 miles.....	38,152 29
Proportion of cost for Michigan—All.....	

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

Main line:		
New cars .....	\$128 30	
Total .....	\$128 30	
Net addition to property account .....		\$128 30

## ANALYSIS OF EARNINGS.—ROAD ALL IN STATE OF MICHIGAN.

## FREIGHT EARNINGS.

Main line and branches:		
Through traffic .....	\$28,446 85	
Total traffic .....	\$28,446 85	
Total freight department earnings .....		\$28,446 85
Per train mile .....		1 82
Per mile of road .....		4,741 14
Total transportation earnings, entire line .....		\$28,446 85
Transportation earnings per mile of road .....	\$4,741 14	
Transportation earnings per train mile .....	1 82	
Total earnings from operation of road .....		28,446 85
Total earnings per mile of road .....	4,741 14	
Total earnings per train mile .....	1 82	
Total income from all sources .....		28,446 85
Proportion of income for Michigan: All .....		

## ANALYSIS OF EXPENSES.

## MAINTENANCE OF WAY AND STRUCTURES.

Repairs of roadway .....	\$7,447 22
Renewals of ties .....	89 52
Repairs and renewals of buildings and fixtures .....	117 92
Total .....	\$7,654 66

## MAINTENANCE OF EQUIPMENT.

Superintendence .....	\$588 35
Repairs and renewals of locomotives .....	1,080 04
Repairs and renewals of freight cars .....	2,610 55
Total .....	\$4,278 94

## CONDUCTING TRANSPORTATION.

Superintendence .....	\$588 35
Engine and roundhouse men .....	4,212 65
Fuel for locomotives .....	3,329 60
Oil, tallow and waste for locomotives .....	273 66
Other supplies for locomotives .....	1,739 47
Train service .....	5,413 95
Station supplies .....	326 34
Other expenses .....	17 75
Total .....	\$15,901 77

## GENERAL EXPENSES.

Taxes .....	\$611 43
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## RECAPITULATION OF EXPENSES.

	Per cent of Expenses.	
Maintenance of way and structures .....	28.91	\$7,654 66
Maintenance of equipment .....	15.04	4,278 94
Conducting transportation .....	55.90	15,901 77
General expenses, including taxes .....	2.15	611 48
Total operating expenses and taxes .....		\$28,446 85
Operating expenses and taxes per mile of road .....		\$4,741 14

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Quincy Mine to Quincy Mill, March, 1890.

## MAIN LINE.

	Miles.
In Michigan, from Quincy Mine to Quincy Mill .....	6
Total length completed .....	6
Aggregate length in Michigan of sidings, spurs and other tracks not above enumerated .....	1.88
Aggregate length of tracks in Michigan belonging to this company, computed as single track .....	7.88

Gauge of track, 3 feet

## Number of bridges and trestles in Michigan.

	Number.	Aggregate Length, feet.
Wooden trestles .....	9	1,517

## Crossings.—Railroad and highway.

What railroads cross your road at grade in this State, and at what locality?

Mineral Range Siding R. R. at Quincy Mine.

What railroads cross your road either over or under your grade in this State, and where?

Over:

Franklin Tram R. R. at S. E.  $\frac{1}{4}$  Sec. 25, T. 55 N., R. 34 W.

## Stations.

Number of stations on whole lines .....	2
Same in Michigan .....	2

## Employés.

Number of persons regularly employed on all roads operated by company, including officials (all in Michigan) .....	37
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Classify your employés as per following list:

	Number.
Brakemen .....	2
Conductors .....	2
Engineers .....	3
Firemen .....	3
Laborers .....	20
Shopmen .....	2
Yardmen .....	3
Others .....	4

*Road bed and track.*

Number of track sections in Michigan .....	1
Average length of sections (miles) .....	6.
Average number of men in each section gang .....	8
Number of new ties put in whole line during the year .....	746
Number of new ties put in track in Michigan .....	746
Average number of new ties per mile of road .....	124

*Bridges and culverts.*

Amount of trestle work replaced with stone during the year (linear feet) .....	370.
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## ROLLING STOCK.

	Number.	Present estimated value.
Number of locomotives of more than 30 tons weight, exclusive of tender.....	3	\$16,000 00
Total.....	3	\$16,000 00
Number of platform cars.....	8	\$1,100 00.
Number of ore cars .....	50	16,000 00
Number of conductors' way cars.....	1	150 00
Other cars .....	2	800 00.
Total.....	61	\$18,050 00

What patterns of power brakes have you in use, and the number of locomotives and cars with each?  
Eames vacuum, 3 locomotives.

What pattern or patterns have you adopted for use?  
Link and pin. (Deadwood meets before coupling is made.)

## MILEAGE TRAFFIC, ETC.

*Train mileage.*

	In Michigan.
Miles run by freight trains during the year.....	15,696.
Total mileage of trains earning revenue.....	15,696.

*Freight traffic.—Road all in State of Michigan.*

	Tons.	Miles.	Rate.
Number of tons of through freight carried, earning revenue.....	555,543	6	
Total tons of freight carried, earning revenue.....	555,543		
Total freight mileage or tons carried one mile.....	3,333,258		
Average ton haul for through freight.....		6	
Average amount received for each ton haul.....			\$0 05¼
Average receipts ton per mile, for through freight.....			08¼
Estimated cost of carrying one ton one mile.....			08¼

## FREIGHT TRAFFIC MOVEMENT.—ROAD ALL IN STATE OF MICHIGAN.

*Company's material excluded.*

## FREIGHT ORIGINATING ON THIS ROAD.—WHOLE TONS.

Products of mines—(ores) copper rock.....	555,543
Total tonnage.....	555,543
Per cent.....	100.00.



STATE OF MICHIGAN, } ss.  
COUNTY OF HOUGHTON, }

S. B. Harris, vice president, and E. D. Johnson, secretary and treasurer, of the Quincy & Torch Lake Railroad Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1896, to the best of their knowledge and belief.

[L. S. OF E. E.]

Signed,

S. B. HARRIS, *Vice President,*

E. D. JOHNSON, *Secretary.*

Subscribed and sworn to before me this 19th day of March, A. D. 1897.

A. F. MACDONALD,  
*Notary Public.*

















261639  
Michigan. Railroad commission.  
Annual report, 25th, 1897.

DATE

NAME

DATE

NAME

385.374

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